

February 1982

Computer Faire, 333 Swett Road, Woodside CA 94062

(415) 851-7075

## 30,000-40,000 Expected at 7th Computer Faire in S. F.

Friday through Sunday, March 19-21, the West Coast Computer Faire will take place for the seventh time. Last year, this event drew almost 32,000 to its 3-day conference program and product exposition that included well over 500 booths.

This year, over 100 speakers are expected to participate in the Faire Conference. Talks will range from introductions for novices and discussions of business and educational computing, through a large variety of applications, to "heavy" technical presentations. (See the partial listing of the Conference Program, elsewhere in this issue.)

The exhibition area has been expanded to the capacity of San Francisco's Civic Center convention complex, having over 600 booths. This includes a set of microbooths, unique to the Computer Faire, that provide exposure to innovative but undercapitalized entrepreneurs.

There will be meetings of a number of user groups including users of Tandy TRS-80, Apple, Commodore Pet, Zenith Z-89 / Heath H-9, CP/M, etc.

Half-day and full-day seminars are also being planned, including introductions to business computing, Basic, Pascal, etc. (Faire registration includes admission to the conference program and the exhibits, however, there will be additional fees for these in-depth training seminars.)

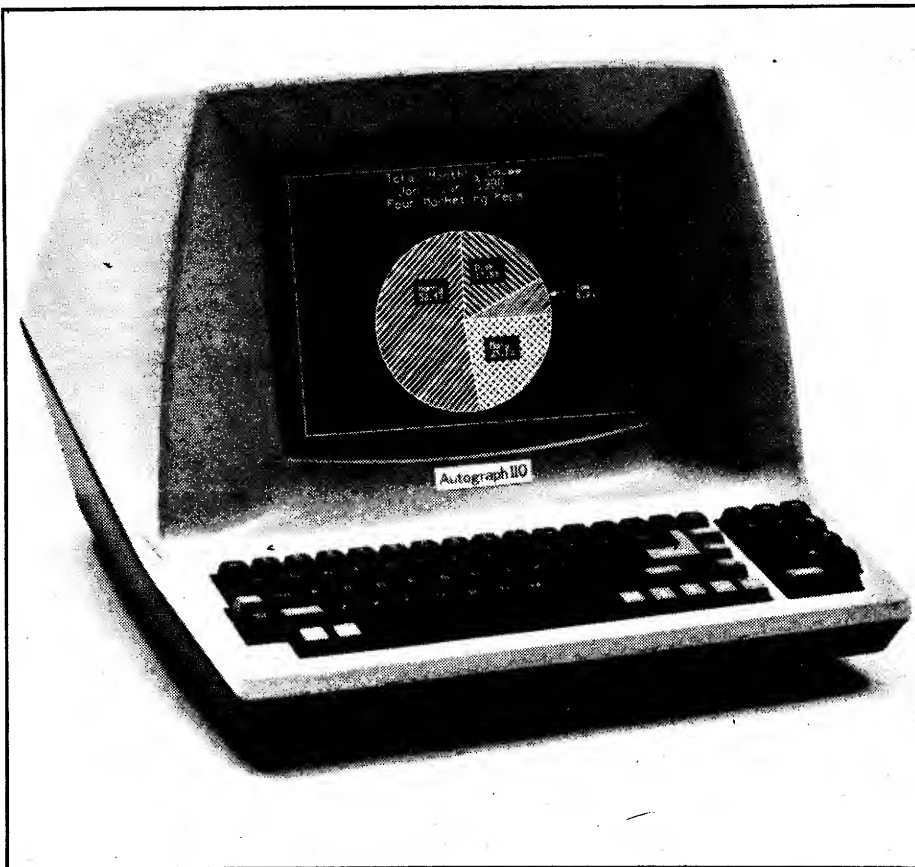
### Conference Session

## Stock-Market Software Review

"Stock-Market software to support the small investor on his desktop computer is a new product — even on the short-term timescale of computer technology," says R. E. Packer.

Packer's 7th Faire talk, "Which Stock-Market Software?" will present software for the small investor by division into four levels, with example packages described. Levels covered will include: straightforward accounting pro-

## The New MQI Graphics Computer Terminal



A conversational computer terminal with several graphics options is the newest offering from MQI Computer Products of Mountain View, CA.

A new conversational computer terminal that provides several graphics options was recently unveiled by MQI Computer Products.

The MQI Autograph 110, based on the popularly priced TeleVideo 910 conversational terminal provides many CRT features, plus graphics options that make it compatible with many graphic software systems, including the Tektronix Plot 10. These features give the user capabilities necessary for the arrangement and display of any type of information in graphic formats.

Features of the 110 include switch-selectable compatibility for emulating the Lear Siegler ADM3 or ADM5, Hazeltine 1410 and ADDS 25 or Viewpoint. This provides system versatility for the 110 without requiring system modifications.

For more information, please contact: MQI Computer Products, 2615 Miller Ave., Mountain View, CA 94041, 415-948-8961.

## \$4 Million Order for Micropolis

Monroe Systems for Business, a subsidiary of Litton Industries, Inc., has ordered 5.25-inch floppy disk drives valued at more than \$4 million from Micropolis Corporation, a Chatsworth, California based manufacturer of low cost, compact mass storage devices.

Micropolis' drives will be incorporated into Monroe's recently introduced OC 8800 occupational computer and EC 8800 educational computer.

## Editors are the Worst Gossips or Gossips are the Best Editors?

by Jim C. Warren, Jr.

Running a computer convention and publishing a coupla computer rags is near-Nirvana for a techno-gossip. It places one in the middle of the computer information knitwork (sort of like a snag?). A multitude of rumors flow in one ear and . . . onto paper — some of which may even be true.

Summarized, here, for the entertainment (and possibly for enlightenment) of the reader is a semi-random selection from our pile-file of recent ribald rumors and rabid opinion.

### 'BOUT IBM

After seeing the IBM personal computer, we join Apple in applauding IBM's entry into the consumer(?) computer market. By issuing the incantation so holy to so many — "I B M" — it validates that marketplace in the geriatric minds that insisted personal computing was a mere novelty (like Bell's telephone and those belching horseless carriages).

It seems certain to expand the distribution of computing power to the public, probably not even harming the dollar sales of many of the "old line" micro makers (though certainly cutting into their market percentages). And, IBM is offering an excellent product.

### SO MUCH, SO RIGHT

Frankly, we were somewhat surprised that such a conservative goliath as IBM did so many things so right in their personal computer, given the hyperdrive speed of development in microcomputing.

With their p.c., they have done an excellent job of being many things to many people — comfy keyboard, color graphics, sound generator, printer, 640 x 200 graphics resolution (higher'n competitor Apple), "mature" packaging, and excellent documen-

tation (something that is disturbingly novel in the micro world).

They went outside for their software (computer programs) — a semi-unique action for IBM. They chose to offer the microcomputer industry's "standard" disc operating system, CP/M, as an option (a choice we hear was made at the last minute), along with their version of DOS from Seattle's Microsoft. And, they have instituted a software publishing department to which outside software producers can contribute royalty-earning software. Bravo!

Delightfully, they have priced their system about the same as the list price of their Apple II target, thereby allowing it to be purchased by mere humans.

And, we believe they are aggressively pursuing such desirable add-ons such as a larger-capacity data storage discs and probably multi-computer networking.

We are also much impressed with the highly professional and ethical manner in which we have noted them conducting business. They maintain very tight control over the development and software for their product (no hip-shootin' EE's — that's Egotistical Engineer — installing glitches that become undesirable "features"). Also, they speak no ill word of their competitors, in private or public . . . a somewhat novel event among micro moguls.

### A MARKETING GLITCH

But, IBM may have slipped in setting up its marketing. It has chosen to make its p.c. available, initially, only through IBM stores, Sears business stores (hopefully better-operated than Sears retail stores), and some Computerland stores (contrary to popular impression, not all Computerlands can qualify to carry the IBM machine — they are accepted by IBM on a store-by-store basis).

And, of course, none of these three retailers will stray from the "suggested" list (continued on page 2)

## 7th WEST COAST COMPUTER FAIRE

Conference & Exposition

on

*Inexpensive Computing for Business, Industry, Education & Home*

### San Francisco Civic Auditorium & Brooks Hall

San Francisco Civic Center  
Lots of Parking on the Weekend

Over 500 exhibits  
(Over 31,700 attendees last year)  
March 19 (Friday) 9 a.m. - 6 p.m.  
March 20 (Saturday) 9 a.m. - 6 p.m.  
March 21 (Sunday) noon - 5 p.m.

Pre-registration available at participating stores & clubs  
At-the-door registration: \$15  
(includes Conference Program & Exhibition for all 3 days)  
Computer Faire, 333 Swett Road, Woodside CA 94062, (415)851-7075

(continued from page 1)

price. So much for free market competition (does OPEC have four characters or three?). They say they expect to accept other retailers, later, but it appears that will not occur for some time into the future.

And, this decision has left a freeway on which some hot competitor can gleefully drive into the newly IBM-expanded market. That freeway is paved with the mass of systems groups and retailers, furious at not being allowed to even bid for the opportunity to be among the initial distributors of IBM machines.

Additional fuel for the entry of new IBM competitors is offered by the fact that IBM's disc operating system is not an IBM-exclusive — Microsoft can offer it to other manufacturers, just like Digital Research with their CP/M.

#### ENTER THE VICTOR, SIRIUSLY

And, there is a hot competitor.

Background: Chuck Peddle is one of the better-known frontiersmen (frontierspersons?) in the Silicon Valley. He earned his Dan'l Boone button by creating one of the first low-cost microprocessors, the 6502 for MOS Technology, back in the early days of microprocessor design. He then created the Pet (the first-announced, fully-constructed consumer computer) for Commodore. He has now spun off, created his own company named Sirius Systems Technology (Scotts Valley, California), and created the Sirius One (pun undoubtedly intended).

#### SILICON SYMBIOSIS

In a delightfully symbiotic move, Chuck struck a deal with Victor Business Products to be the exclusive peddler of the Sirius One in North America, being marketed under the name of the Victor 9000. This gives Victor a quick way to become a serious competitor in the personal computing market, and gives Chuck ample backing and a very mature and successful nationwide marketing operation.

(Victor is the largest manufacturer of traditional desktop calculators in the U.S. It is an old-line, conservative company, and a subsidiary of Kidde (pronounced "Kiddah"; not "Kidd" nor "Kiddie"), the dollar-strong fire extinguisher manufacturer.)

#### THE VICTOR 9000

The Sirius machine is well worth looking at. One of the sages of the computer industry said to us, "Chuck has done all the things IBM should have done." We think IBM did lots of things right, but let's compare:

Like the IBM machine, it uses a 16-bit, 8088 as its central processing unit. Like IBM, Sirius has a detachable keyboard. In fact, it has five keyboard options (typewriter, word processor, programmer, etc.).

IBM offers a television monitor as an option (a necessity for most useful information processing). The Victor/Sirius machine comes with a green phosphor screen (easy on the eyes) that is tiltable and turnable — not just a monitor with a handle on the top.

The 9000 has a graphics mode with an 800 points by 400 points resolution! IBM offers, at best, 640 x 200, about double Apple's "high res" graphics.

#### 132-CHARS x 50-LINES OF TTEXT!

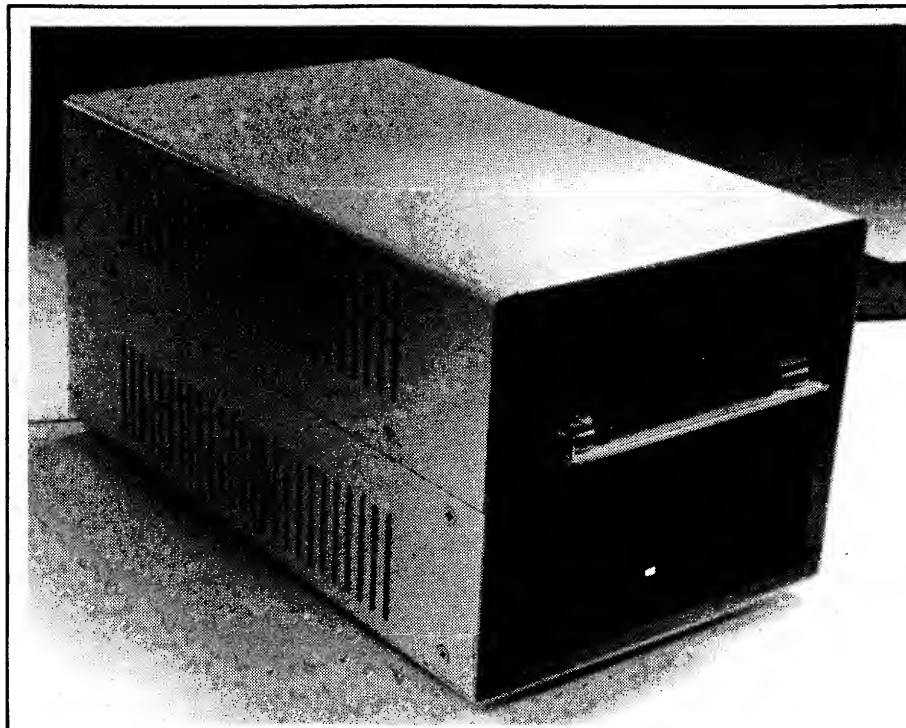
If you get tired of skinny paragraphs and lines running off the traditional 80-character x 25-line display, you can switch to the Victor's 132-character x 50-line display, complete with fully legible upper and lower case characters, with descenders (the "legs" that hang below the line in 'g', 'j', etc.). That, alone, is enough to sell it to us word-junies.

IBM's character display is made of 9x14 dots. Sirius' is 10x16 or 16x16. The character set is loaded into part of the computer's memory that is user-accessible, so if you don't like what you see, you can change the fonts to suit your palate.

Unlike IBM, the Sirius unit does not currently support color (a decision that was debated long and hard), but the system has all the hooks to add color, later. They felt that (a) their first marketplace is the business market, to which color is less useful than for home and educational computing, (b) it's very difficult to do really useful things, in an information sense, with color, and (c) hi-res color video monitors capable of supporting those great graphics and 132x50 text displays cost lots!

#### 1.2 MEGABYTE FLOPPY DUET

The 9000 comes with dual 5¼" single-sided floppy discs, like the IBM. Unlike the IBM, which can store 163K bytes (163,000



SafStor TD-15 is a new tape drive from Vector Graphics of Thousand Oaks, CA.

## Vector Graphic's First Tape Drive

Vector Graphic, Inc. has introduced a 15-Megabyte cartridge device for back-up and archival storage service with their Winchester disk microcomputer systems, the 3005, the 3032, the multi-user 5005 and the newest system, the 32 Megabyte 5032.

Designated SafStor TD-15, the new tape drive uses 1/4 inch tape cartridges to back-up and restore data to or from Vector Winchester-based systems. Downloading—data transfer from disk to tape—and uploading—data transfer from tape back to disk—as well as a number of other operations are accomplished under program control.

The desk-top unit is priced at \$3,695. More information is available from: Vector Graphic, Inc., 500 N. Ventu Road, Thousand Oaks, CA 91320, 805-499-5831.

characters), the Victor system packs 1.2 million characters into those two on-line minifloppys.

#### CP/M-86 & MSDOS

Like the IBM p.c., the Victor system offers both CP/M-86 (available right now — IBM's is expected, soon), and Microsoft's also-IBM DOS. Unlike IBM, both MSDOS and CP/M-86 come with the system — CP/M is an option with IBM.

And there is the usual package of support software, e.g. for financial forecasting and analysis, they offer a VisiCalc clone (VisiClone?) called VictorCalc from Image Systems; for word processing, they offer a Select text editor, etc.

#### THE FUTURE IS VERY SOON

Oh yes, Victor will be offering large-capacity disc storage (for those who find their 1.2 megabytes too cramped) before the end of '82, and expect to offer a medium-speed networking facility, also before the end of the year.

Folks who choose a Victor/Sirius should also watch for the popular Unix operating system licensed from Bell Labs as yet another 1982 option (installed and supported by one of the best micro unixizers in the business).

#### ORANGES & APPLES — HOW MUCH?

The Victor/Sirius system with dual floppys (1.2MB), screen (80x25, 132x50, and 800x400), 128K of memory (that's minimum), MSDOS and CP/M-86, lists for \$4995, a price that might be haggled once the supply pipe begins to fill.

In this apples-with-oranges comparison, an IBM system with dual floppys (163K), screen (80x25 and 640x200), only 48K of memory and MSDOS is \$3525, available from list-price-only dealers.

#### DATASOURCES

The IBM data for this was lifted primarily from a potent, 150-page product and market assessment, *IBM's Billion Dollar Baby: The Personal Computer*, by Isaacson & Julissen, available for \$450 from Future Computing in Richardson, Texas. The Sirius/Victor data came by voice, verified with Sirius.

Conference Session

## R&D Partnerships and Software Development

"Research and development (R&D) limited partnerships for the development of software and other computer technology are a direct answer to the businessman's need for capital," says Attorney Fred Greguras of Omaha, Nebraska.

In his Faire talk, "Raising Capital for the Development of Software and Other Computer Technology Using R&D Partnerships," Greguras will explore the use of R&D limited partnerships in developing technology-based products. These partnerships can be important alternatives to the use of tax credits, says the attorney.

"An R&D limited partnership can provide a means of financing the development of technology, of shifting the risk of development and the capitalization of a business activity without giving up control in the overall business enterprise," says Greguras. His talk will be published in the *Proceedings of the 7th West Coast Computer Faire*.

## Instant Software for Records and Bills

Instant Software Inc. of Peterborough, New Hampshire, announces the release of their new record keeping and billing program for the small-to-medium-sized business: Client Records/Bill Preparation. This program is for the Apple II or II Plus, 32K with disk drive.

Client Records/Bill Preparation is designed to help lawyers, doctors, consultants, and other service business owners to keep accurate records and prepare monthly bills. This program, which can be modified to suit an individual business, allows the user to record client name, address, phone number, zip code, and four descriptive comments. The bill preparation function automatically totals up all charges that have been added to a client's file since the last billing and lists these charges, in detail, on the new invoice.

For more information, please contact: Instant Software, Inc., Peterborough, NH, 603-924-7296.

Experience is said to be the best teacher. And, considering what it costs, it should be. — Paul Dunham

For more info on the IBM system, contact them at Box 1328, Boca Raton, FL 33432.

Victor can be reached in Chicago at 312-539-8200. Their dealer maker is Richard Farkas. Their software acquisitions dude is David Boudreau.

#### MICROMATION'S MARINER — A CLASSY CHASSIS

Folks who want to run an unusually well engineered multiprocessor, multiuser system — right now (rather than in a year or so) — should take a look at the Mariner from Micromation.

For a starter, it has one of the best-designed chassis we have seen. It is an attractive, shaped steel box. It stands up on the floor (on recessed wheels), rather than laying

(continued on page 4)

### Inexpensive Business Computing

a Computer Faire publication, 333 Swett Road, Woodside CA 94062  
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Subscriptions: Upon request, random issues will be sent without cost. To receive all issues, subscription price for U.S. is \$6.00 per year. Please write for foreign rates. Send subscriptions and requests for sample copies to: Computer Faire, 333 Swett Rd., Woodside CA 94062.

## VideoNet Forms Consulting Division

Responding to the changing demands for videoconferencing services, VideoNet, a producer of videoconferencing programming, has formed a new Consulting and Training Division.

"Although videoconferences such as those we've produced for the past two years will continue to be a primary thrust of our business and future growth, we realize that they are only a part of the videoconferencing industry," VideoNet's President Gary Badoud stated. "Because of the hands-on experience we have, corporations are now looking to us to assist them evaluate and plan for permanent communications systems."

Badoud also stated that the company has opened an office in the San Francisco area and has moved its East Coast office in Stamford, Connecticut, into expanded facilities.

Since its inception in 1979, VideoNet has become recognized as one of the leaders in the videoconferencing industry. In September of this year, Oak Communications, Inc., the Rancho Bernardo, California, manufacturing and communications company, purchased 81 percent of VideoNet which has provided the company with enhanced financial, personnel and technical resources.

## Financial Modeling Software

Vector Graphic has introduced ExecuPlan II, a new version of its financial modeling and planning software. ExecuPlan II offers remote access, new sort and if-then-else and logical operator capabilities, interfacing to programs or data bases written in BASIC, FORTRAN and other high level languages.

ExecuPlan II features include a remote access command; a display of numbers in accounting format with parentheses or trailing or leading minus signs; resolution of forward references by automatic calculation of formulas, thus permitting recursive/iterative functions; formula compression for increased data storage; and selective clearing of any component of a model without affecting other data.

ExecuPlan operates on all Vector microcomputer systems and the newer multi-user Winchester disk systems such as the 5005 and 5032. Cost of ExecuPlan II, which is available through Vector dealers, is \$150.00.

More information on ExecuPlan II and Vector microcomputer systems is available from Vector Graphic, Inc. at 500 N. Ventu Park Rd., Thousand Oaks, CA 91320, 805-499-5831.

## Fortune Raises Largest Venture Capital Package Ever!

A venture capital package of \$8.5 million—believed to be the largest amount of money ever raised for a microcomputer company start-up—was announced today by a new Silicon Valley firm.

Fortune Systems Corporation, a new company headed by one of two co-founders of Intel Corporation, will design, manufacture and market a low-cost, extremely high performance desktop computer system aimed primarily at the small business segment of the market.

Fortune Systems raised the money from seven investors, which include Thomson-CSF, a multi-billion dollar French diversified electronics company; Greyhound Corporation; the Equity Group of First National Bank of Chicago; Banque de Paris des Pays-Bas; and Walter E. Heller & Co.

Other investors include two venture capital firms: Brentwood Associates and Asset Management Company, both of which have interest in numerous other computer companies.

Fortune Systems, which already has more than 65 employees, is presently in a 26,000 square foot plant located at 1501 Industrial Rd., San Carlos, CA 94070, 415-595-8444.

### Conference Session

## How to Leave and Compete Without Getting Sued

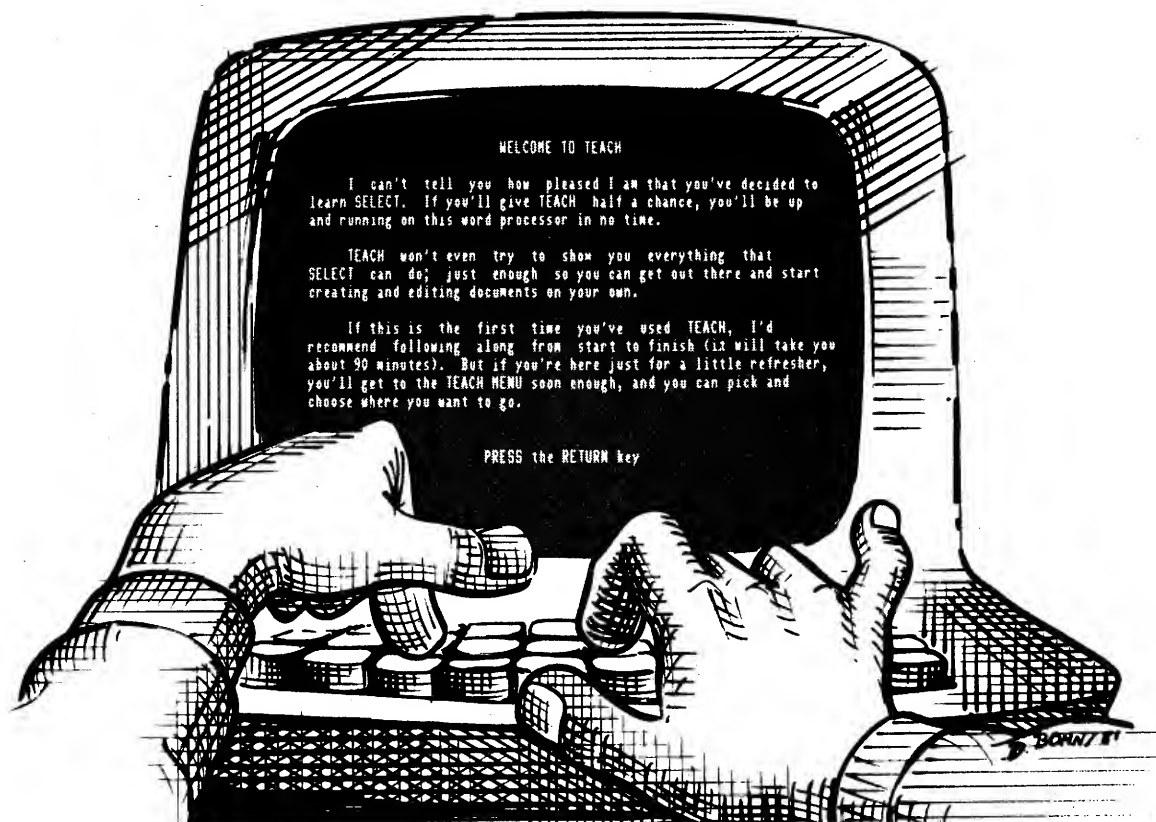
High technology "employers are acting aggressively to protect what they view as their trade secrets and are suing departing employees for everything from stealing technology to raiding employees," says James H. Pooley, who will speak at the 7th West Coast Computer Faire.

His talk "How to Leave and Compete with Your Employer Without Getting Sued," will tell employees what to consider as they plan to leave and compete with their employer, on their own or with another firm. Pooley's comments will also help employers recognize competition and decide how to deal with it.

Pooley's talk, adapted from his newly-published book "Trade Secrets: How to Protect Your Ideas and Assets," will include a checklist of considerations for those who want to leave a job and compete with a past employer.

"You should be cooperative, honor your agreements, and take nothing from your prior employment except the skills you have acquired. Creating an atmosphere of responsible professionalism is the best protection against a lawsuit," says Pooley, whose paper will be published in the *Proceedings of the 7th West Coast Computer Faire*.

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SELECT runs on any CP/M based hardware and you'll see it displayed on more new hardware this year. Ask your dealer to sit you down in front of SELECT. Wave him away. Type "T" — you've just enrolled in the common sense school of word processing.

**SELECT... The Word Processing People™**



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• CP/M is a trademark of Digital Research.

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## Highflying Computer Navigator

RNAV3 Navigator, an air navigational aid, is now available for pilots from Briley Software. The program uses Commodore PET/CPM microcomputers.

The computerized navigator obtains true straight line courses for aircraft having DME equipment and VOR-TO-VOR courses for aircraft without the DME ability.

RNAV3 Navigator performs hundreds of trigonometric functions per flight, handles the spherical nature of the earth (polar coordinates), and searches for the closest radio signal while the flight path is being calculated.

As complicated as the program is, the pilot provides only four items: Flight Option, Waypoint Interval (if DME used), Departure and Destination Coordinates. The calculated flight path is displayed on the computer's screen and optionally sent to a printer. Each waypoint of the flight contains the closest VORTAC code-name, radio frequency, radial, and distance from path. Each point also displays the magnetic compass bearing, nautical miles traveled, and miles left to complete.

The program comes in two versions. One fits within the 8K sized PET microcomputer that covers the three Pacific States, Idaho, Nevada, and Arizona. A 16K version covers the Eleven Continental States west of the 102nd Meridian. Other versions covering the rest of the United States are being planned.

The 8K version costs \$25, and the 16K \$30. For more information, please contact: Briley Software, Box 2913, Livermore, CA 94550-0291, 415-455-9139.

### Conference Session

## Computer Design of Tiffany Lamps

In his upcoming 7th West Coast Computer Faire talk, "Computer Assisted Design of Tiffany Lamps," Mike Higgins will explain how computers can help make for more creative stained glass and window design. The proprietor of Space Glass, in Duncans Mill, California, says the computer is a liberating, rather than inhibiting, design tool.

"Older lamp designing techniques require making a mold and fitting pieces of glass to it by trial and error. The effort involved . . . makes it more economical to produce many lamps from the same pattern. This is not true with my computer assisted program . . . I never have to produce multiple copies of lamps to recoup the investment," says Higgins.

At the Faire, Higgins will describe his craft, the algorithms he uses, and his interaction with his programs which have been run on a PDP11 computer, as well as a small micro system.

# Vive la difference!!

(That's what our customers say!)

The *difference* between choosing a small business computer system from **Computer Applications** and buying one anywhere else is that our systems are delivered as an integrated package—hardware, software, training support, and service—a package uniquely designed to meet the needs of *your business*. And you get custom service at "off-the-shelf" prices.

The *difference* is that **Computer Applications** systems help you use your time more productively, *as soon as your system is installed*. From the time our training sessions with your staff are over, your business

is on the road to running more efficiently and more profitably. You and your staff will be ready to start using the system for the applications that are essential to the survival and growth of your company. Applications such as:

- **Accounting**  
Accounts Receivable  
Accounts Payable  
Payroll  
General Ledger  
Sales Analysis  
Order Entry  
Inventory Control
- **Financial Planning**
- **Project Scheduling**
- **Word Processing**
- **Data Base Management**  
File Management  
Mailing List Maintenance

You won't waste time trying to decipher operating systems, command structures, bits and bytes, or computerese.

The *difference* is *support* that's there when you need it, from simple explanations and clearly written documentation to help in getting your system to jump through those fancy hoops. And responsive and effective service and maintenance.

We think you'll like the *difference*. See for yourself. Call us for an appointment:

## computer applications

2112 berkeley way berkeley, ca 94704 415/848-9110

## Introduction to Business Computing

An in-depth, 4-hour seminar for the business decision-maker wishing to know about inexpensive business computing. Questions that will be addressed include:

- What can a business executive really do with an inexpensive computer?
- How can a microcomputer be applied to decision-making, job quotes, financial planning, government and tax reports, graphic presentations, staff efficiency, electronic filing, information management, etc.?
- How can a small computer be practically used in a fast-paced, highly competitive, rapidly changing business environment?
- What does a business person need to know about equipment, programs, and applications of inexpensive business systems?

### The Seminar

Business problems and available problem-solving tools  
Current state of business equipment, programs & systems  
Characteristics of computers a business person should know  
Survey of currently available business microcomputers  
Software — Getting a computer to do what you want it to do  
Applications software for business and financial users  
Questions & answers focusing on registrants' specific problems

### The Lecturer

**Michael Levy**

Independent management consultant and business systems analyst  
Trouble-shooter for groups of East Coast venture capitalists  
Experienced business executive, including several years as President of GRI Computer Corp.  
(a multi-million dollar manufacturer of special-purpose computers [not a Faire exhibitor])

### Schedule

This seminar will be offered on Friday, and repeated for a second and third group on Saturday and Sunday, March 19-21.

Each time, it will meet 9:30-12:30 for a formal presentation, and reconvene at 4pm-5pm for an in-depth question-and-answer session. This will give participants an opportunity to apply what they have learned in the morning session as they tour the 600-or-so exhibits, and return to ask questions about their own applications, plus questions that will undoubtedly arise during the day.

The seminar will take place in the San Francisco Civic Auditorium, at Grove & Larkin, during the 7th West Coast Computer Faire.

Registration is \$95 and includes admission to the Computer Faire and a complete set of seminar handouts.

Preregistration is *strongly* advised. Space is limited to the first 110 registrants and the seminar is expected to be heavily subscribed. Call the seminar Registration Desk at Faire Headquarters, (415)851-7075, 10am-4pm, Monday-Friday. MasterCard & Visa accepted.

(continued from page 2)

around occupying horizontal surfaces that could better be cluttered with dust and unread papers.

Example of high-quality human engineering: It has a spring-loaded safety cover over the reset switch — almost unheard of in the cliff-hanging microcomputer world.

With one click the front folds out carrying all of the S-100 bus and boards for ready access — a joy, indeed, for those who must work on imperfect machines.

Obviously much thought, care, and careful human engineering went into the design of this crate.

Then there's the functional guts. It has two 8" dual-density floppies discs and/or a 21megabyte (21 million characters) non-removable disc. For backup, it offers a digital tape cartridge system capable of storing 20MB per cartridge.

Each user on the system — there can be up to eight — has their own computer card, complete with a fast central processing unit (Z-80) and a full 64K of memory. This is much better than sharing a single CPU and memory like in the old (expensive) time-sharing systems.

For software, Micromation offers CP/M (single-user), a "modified and enhanced" MP/M (multi-user), or their home-grown system that is CP/M-compatible and includes an integral DBMS.

Micromation's home-based in San Francisco, 415-398-0289.

### QUALITY HAND-OLDERS

We liked the Mariner so much, we got one for our own in-house use. Now, we could have taken a week or two and bumbled through the copious documentation to set it up. Instead, we took our own oft-given advice, and chose the more sensible — and cost-effective — approach of having a knowledgeable systems house provide a hand-holder to install the unit and teach us about the ON-button and such things.

After watchin' 'em work, and seeing the manner in which they are supporting us, we are delighted to recommend them to other folks who prefer pleasure to pain in dealing with things technical. Our contact was Don Elmer, a knowledgeable computerizer and systems integrator who specializes in Micromation gear. His company is Computer Applications (Berkeley, 415-848-9110). He is also closely allied with a group of solar folks specializing in computer applications related to thermal engineering.

### ALPHA HANDS

While we are ranting about unusually supportive technofolks, we must mention two unusually outstanding and knowledgeable Alpha Micro dealers — Alpha Information (Palo Alto) and Computer Alternatives (San Rafael). We have been running a large Alpha Micro system, in house, for several years, and were often less-than-enchanted with the manner in which the factory ignored its end-users.

What the manufacturer lacked, however, has been more than made up for by those two local Alpha dealers. When we needed help, they were there — including nights and weekends. When we had obtuse technical questions about obscure system innards, they could consistently answer them.

There are some computer dealers who are long on marketing and mouth, and all-too-short on technical ability and support — for which the computer naive must be most wary. Computer Alternatives and Alpha Information are competent at marketing, but — much more important — they have the in-house technical skill, parts inventory, and accessibility to provide the kind of support that is absolutely essential for business people who choose to remain competitive and efficient by computerizing.

**SNICKER, CHORTLE . . . GRRRR, GROWL!**

If you have humor and haven't yet read Stanislaw Lem's *The Cyberiad, Fables for the Cybernetic Age*, trample on down to yer local ink shop and glance through it — it's some of the more innovative fantasy-science fiction we've seen.

Speaking of innovative sci fi, we have been trying to locate/recall a presumably long-dead paperback we guffawed through, 'way back in the hippie '60's. It was a satire having to do with an era when the standard for civilized behavior was the hippie/doper role model, and had something vaguely to do with two principle characters running around in a wildly painted bus, perhaps doing some sort of detective venture. Actually, it was probably more a future social fantasy type of fiction than "traditional" science fiction. If you recall it, please pass the word along to us.

Then there is the much less laughable book — proposed to be nonfiction (and having nothing to do with computers, science, engineering, or other useful things): *The Seven Sisters*, by Anthony Sampson. It's about the seven major companies in the industry that

(continued on page 12)

## Computers used at New York Marathon

The distant rhythms of computer technology were harnessed to the breathing of long distance runners last October 25 for the 8th running of the famed New York Marathon.

Computers did, in a way, hit the streets a few years ago with computer-aided designs for improved running shoes, and it was only a question of time before computers would directly impact the very clothes of the runners.

For the first time, the more than 16,000 runners from over 35 countries wore computer-generated bibs — complete with machine-readable bar codes and 3-inch high identification numbers.

Three high technology firms joined their products together to form the unique system. They were Printronix, Inc., Irvine, California, manufacturer of impact matrix line printers; Computer Identics, Westwood, Massachusetts, maker of bar code readers and scanning wands; and Quality Micro Systems, Mobile, Alabama, a leading systems house and producer of packages in "intelligent" microprocessor controller boards.

The race marked the first application in marathon history in which machine-readable bar codes were produced by computer-driven printers — on the spot.

Bar code markings are familiar to all of us, most notably, perhaps, on just about every item on the supermarket shelves. The alternating black and white bars are designed to store, or code, large quantities of information in a small space. They are easily read by scanner wands, and can be quickly transmitted to waiting computers.

In the New York Marathon's application, the bar-coded area on the 8 x 10-inch runner's bib required no more space than a theater ticket to store individual runner information such as the entrant's special registration number, sex assigned class, and in 1,000 cases, the "seeding" number.

### Conference Session

## Microcomputers and Academic Medicine

For the last two years, the Department of Obstetrics and Gynecology of the University of Tennessee at Memphis has been implementing software systems designed to handle a range of functions particular to the academic medical environment. Dr. Thomas Abdella, in "Microcomputer Applications in Academic Medicine," will discuss his department's search for greater efficiency.

Among the uses to which they put their system is test grading, which, Abdella says, "is clearly an improvement over the manual methods and it is faster and more flexible than the university test-scoring service." His department also uses graphics generation programs for such projects as the production of 35mm transparencies used in presentations and lectures.

One of the most useful (and most difficult to implement) projects was the clinical database management system. Abdella attributes the difficulties to "the inadequacies and unreliability of the available commercial software" but notes that "in spite of the initial difficulties it has turned out to be the single most important function of our microcomputer project." Dr. Abdella's paper will be published in the *Proceedings of the 7th West Coast Computer Faire*, available at the show in March.

*Inexpensive Business Systems*

No other marathon in the U.S. has as many runners as does the New York Marathon. Bar codes have evolved as a storage medium for the variety of data tabulated during registration and completion.

Bar codes were also used in 1980, but in a less sophisticated manner. They were pre-printed at a New Hampshire printing company, shipped down to New York, and, during registration, hand-stapled to an entrant's previously numbered bib. It was a time consuming and expensive process.

The key to making bar codes work

inexpensively and quickly was possible with the use of four 300-line-per-minute matrix impact line printers from Printronix. The P300's print overlapping individual dots so precisely that completely legible and easily recognized numbers, letters and lines are formed.

Last October's New York Marathon runners saw their bibs generated in six seconds, complete with bar coded information and numbers.

The "brains" of the printers were provided by QMS with a small 10 x 12-inch controller board that was mounted inside the printers. This board told the waiting printer that information was

being read to it via Computer Identics' scanner wand, and that each piece of information was to be printed in a specific location and in designated sizes onto the bib.

During the four days of registration, the four P300s generated more than 16,000 bibs — translating to a 2 x 2.5 mile area, or five square miles.

Perhaps the most poignant realization of just how fast and how far computer technology had come was when Noel Johnson crossed the finish line.

Johnson is 82 years old, and was running marathons when New York City barely had its traffic lights.

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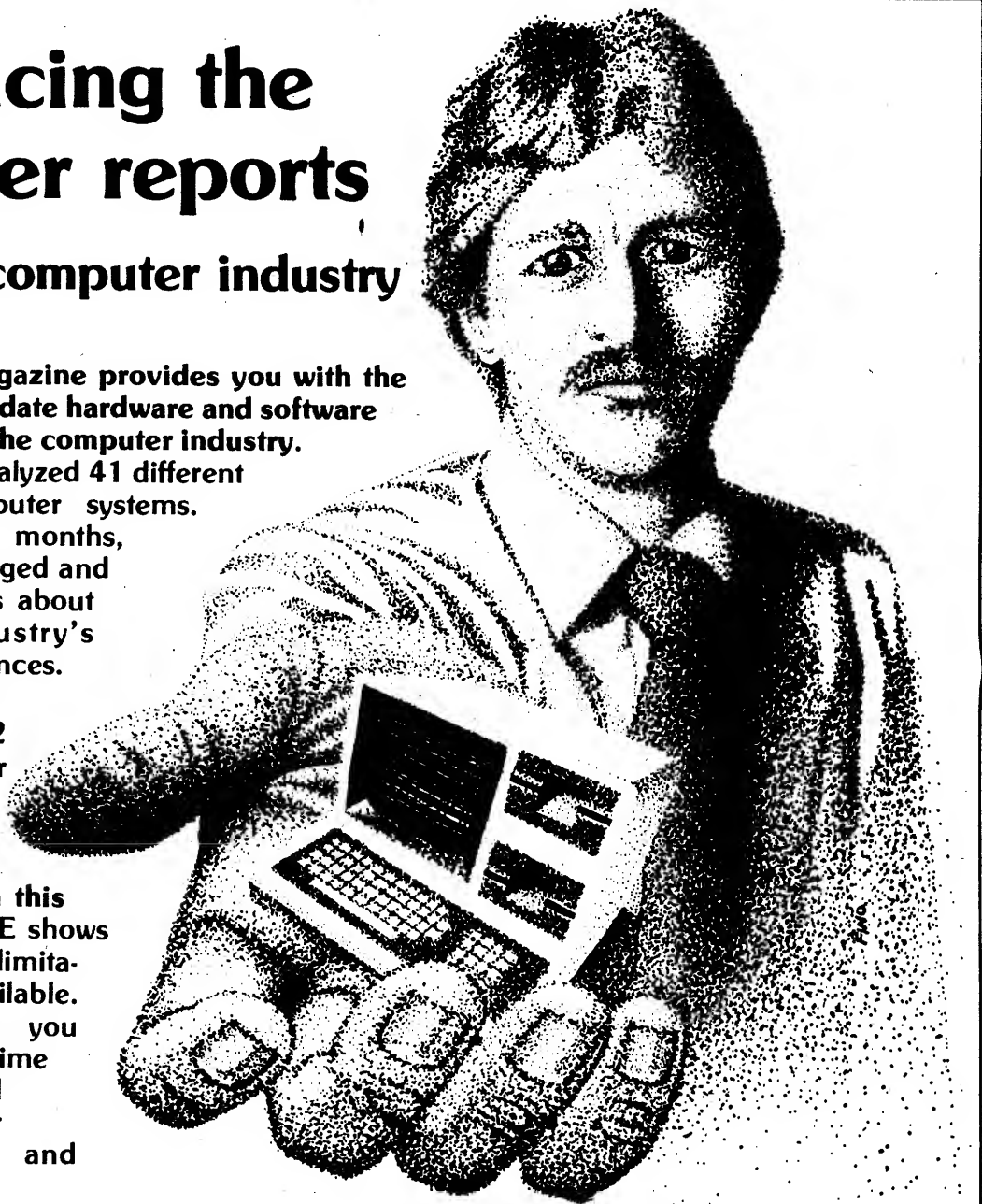
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## Computer Graphics Developments

Three conference presentations at the 7th West Coast Computer Faire will explore the colorful world of computer graphics.

"Computer Animation which would have required a roomful of large computers just a decade ago can be created today on new graphics-oriented personal computers, such as the Atari 400/800 Computer," say David Fox and Mitchell Waite, authors of "Computer Animation Primer."

In their upcoming talk, "Computer Animation Comes to Personal Computing," Fox and Mitchell will assert that Atari users no longer have to be advanced Assembly Language programmers to produce quality animation. The authors will describe how BASIC programmers can create superior animation

on an Atari computer.

In "INTERPAS and RASCAL: A Playful Pascal Cartoon Programming System," three speakers will describe Rascal, a cartoon animation dialect of Apple Pascal and the INTERPAS interpreter, which can run a RASCAL program while showing the actual executed commands, line by line.

Michael Moshell, Charles Hughes, and Garry Amann of Genteware Corporation will discuss the dialect and interpreter, developed as part of the "Computer Power" programming cur-

riculum. RASCAL and INTERPAS are being extended for use by other developers and private users and will soon be implemented on other microcomputers.

Marty Franz says his "Snail Graphics" programming language is moving fast to open new vistas in computer graphics. In his talk, "Snail Graphics: A Graphics Kit for Runic," he will describe this interactive language for CP/M computers.

Runic is "extensible," meaning that the user can add new words to the

language anytime he or she wishes.

"The words are a simple vocabulary for commanding a pen-carrying snail to move across an x-y coordinate system," says Franz, "The Runic programmer then uses these words to create his own word definitions for drawing pictures. This 'vocabulary' approach... is a powerful feature of extensible programming languages."

All Faire presentations will be published in the *Proceedings of the 7th West Coast Computer Faire*, available at the show in March.

## Off-line Data Entry Program

InfoSoft Systems Inc has announced a new version of I/TERM that provides for off-line data entry, editing and pre-processing for remote computer service or time-sharing users.

I/TERM, introduced in 1976, can communicate between your computer and any time sharing system. It receives or transmits from your disk without special timing or operator commands. I/TERM receives data with no pauses, no loss of data, and no special operator conditions.

I/TERM provides control through the keyboard of your computer to the time-sharing service without special actions or communications protocol. Data can be received and at the same time saved on the disk and routed to a local printer. Files may be transmitted directly from disk to the remote computer.

I/TERM receives and transmits either directly or on remote commands using standard teletype ASR-33 conventions (supported by all time-sharing systems). Control codes may be set for program break or on-line exit to agree with those used by any time-sharing system.

For further information about I/TERM, please contact your local dealer or InfoSoft at: InfoSoft Systems Inc., 25 Sylvan Rd. So., Westport, CT 06880, 203-226-8937.

## Conference Session

## Bionic Word Processing

Bradley C. Stewart of the Covox Company says he has "a novel and useful method of processing human speech for machine interpretation." This method is based on the Covox Analog Processor, a Bionic analog processor which extracts the fundamental cues of speech.

"These slowly varying cues reveal those specific features of speech sounds which are associated with intelligibility. And it does so in an optimum noise resistant manner," Stewart says.

In his 7th West Coast Computer Faire presentation, Stewart will discuss the shortcomings of conventional human speech processing, spectral analysis, human speech cues, and applications. The Covox Co., of Santa Maria, California, markets a speaker independent voice commander for use in industrial applications.



Make MICROMATION's MARINER your entry-level system. System expansion is easy and inexpensive; plug in another Satellite processor card, connect a terminal, and you have multiprocessor, multitasking lift-off!

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The background to the MARINER system is a photograph of the Lagoon Nebula, which can be seen with the aid of binoculars in the constellation Sagittarius.  
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# MICROMATION



## New Government Statistic Program

How often have you needed statistical data produced by the Federal Government to satisfy your own or one of your clients needs? As with many other information users, you probably find this need becoming more and more frequent.

The National Technical Information Service (NTIS) has implemented a program to help you. They are attempting to identify statistical programs that produce data in a machine-readable form, and, where possible, make the machine-readable data files available. One of the most widely used statistical data programs is operated by the Bureau of Labor Statistics (BLS), U. S. Department of Labor.

The overall system, composed of time series data and the software to process and analyse the data, is called LABSTAT (LABor STATistics). Time series data files from the LABSTAT Data Base are now available on magnetic tape from NTIS.

For pricing and ordering information on these new products, contact: NTIS, Stuart Weisman, Product Manager, at (703) 487-4807.

### Conference Session

## The Well Behaved Home

For a home to be truly organized today it helps to have a home control system that not only feeds the cat and waters the plants, but turns off lights after people leave a room, irrigates a dry vegetable garden, and greets guests with a spoken message.

Carter Compton Collins developed just such a system as a hobby and will talk about his "Well Behaved Home," at the 7th West Coast Computer Faire.

"Computer control of the home has long been a dream of many visionaries," says Collins, an associate professor at the University of the Pacific, "The real secret of success lies with peripheral input and output devices with which the microcomputer can exert control of the environment. The peripheral functions I describe here are some I could design and readily build at home in a few weekends each."

Illustrations and diagrams accompany Collin's paper which will be published in the *Proceedings of the 7th West Coast Computer Faire*, available at the show.

### Conference Session

## Special Computer Press

"You have a schizoid audience," John Walker, technical editor of *Sextant*, warns computer writers, "Now most of us cannot write the perfect article that ideally engages both the executive and the technician. But writing an article for one, we can still keep the other in mind."

These two groups, tinkering technicians and businesspeople, concerned not so much with hardware as applications, make up a large part of the computer press' audience.

In his talk, "Writing for the 'Special Interest' Computer Press," Walker will discuss *Sextant*, a magazine covering Heath Company and Zenith Data Systems. He will tell how to write successfully for a specialized audience, give tips on submitting to *Sextant* and other magazines, and suggest article topics.

Walker's talk will be published in the *Proceedings of the 7th West Coast Computer Faire*, available at the March Show.

*Inexpensive Business Systems*

## Passport Designs' New Apple Music System

Passport Designs continues to develop the SOUNDCHASER Computer Music System. Based around the Apple II, SOUNDCHASER is both a digital and analog polyphonic synthesizer, a music transcriber, and a music educator.

Passport Designs announces it's Digital Performance Software which turns the Mountain Computer Inc. Music System into a powerful and flexible polyphonic synthesizer with advanced recording features. The software lets you define presets or "instruments" by drawing the waveforms and controlling them with envelope generators, low frequency oscillators and effects generators. SOUNDCHASER Digital is an eight

voice synthesizer. Each voice consists of two digital oscillators each with its own ADSR amplitude envelope. The programmable LFO's let you add subtle vibratos and give the instrument a rich, "fat" sound. The effects generators let you dynamically modify the oscillators' waveforms in memory for phasing, filtering and timbre changes.

SOUNDCHASER Digital revolves around the Music Keyboard and to a certain extent the Apple Keyboard. All voice parameters are displayed and are alterable during performance letting you hear the results of any parameter change instantly. The performance features include a very sophisticated

multitrack sequencer. The sequencer lets you store and playback whole orchestra arrangements by repeatedly recording and layering the individual parts. The sequencer is fully polyphonic and records not only the keyboard information but the preset being played as well.

SOUNDCHASER Digital (Keyboard & Performance Software) lists for \$650. The MCI Music System (16 Oscillators, digital) lists for \$395. For more information, please contact: Passport Designs, Inc., 785 Main St., Half Moon Bay, CA 94019, 415-726-0280.

# 7th WEST COAST COMPUTER FAIRE

## Conference & Exposition

*on Inexpensive Computing for Business, Industry, Education & Home*

\*\*\*\*\*

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- ★ Public Information Utilities
- ★ Legal Aspects of Computing
- ★ Inexpensive Educational Computing
- ★ Biomedical Applications
- ★ Computer Graphics & Art

- ★ Computer Music
- ★ Unusual Applications
- ★ Microcomputing for the Physically Impaired
- ★ Social Implications of Computers
- ★ Simulation Applications & Exotic Games
- ★ Users Meetings, e.g.: Apple, IRS-80, Commodore, FORTH, etc.

*Conference Proceedings will be published and available at the Faire*

31,700 attended last year

March 19 (Friday) : 9 a.m. - 6 p.m.

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# 7th Computer Faire Exhibitors

(as of Jan. 8, 1982)

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Jadde Computer Products  
Japan Microcomputer Club  
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Western Micro Systems  
Yumm Inc.  
Zircon International, Inc.

## BOOTHS

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# 7th West Coast Computer Faire

## 7th Faire Conference Papers

The following is sampling of the papers – proposed for presentation in the Conference Program of the 7th Computer Faire – that have passed preliminary screening as of the press date of this Gazette.

This is only a partial list. Based on the papers currently received and circulating through the refereeing system, the Conference Program is expected to include over 100 speakers. Note: Registration for the Faire covers admission to the exhibits and to the Conference presentations.

### MISCELLANEOUS APPLICATIONS

*A Microcomputer-Based Geographic Information System*  
Benjamin Pierce, Stanford University

*More for Less: The Microcomputer in Local Government*  
M.J. Groat, City of San Francisco

*The Well Behaved Home*

Carter Compton Collins, University of the Pacific  
*Computer Assisted Design of Tiffany Lamps*

Mike Higgins, Space Glass  
*Computer Animation Comes to Personal Computing*

David Fox, et al  
*Simulation Training Research with Microcomputer Systems*

Allen Munro, et al, Behavioral Technology Labs  
*Interpas and Rascal: A Playful Pascal Cartoon Programming System*

Michael Moshell, et al, Gentleware

*Speed Reading and Peripheral Vision Techniques for Computers*

Myron Zeissler, Eagle Software

*A Fifth Generation Amateur Radio Repeater Controller*  
Ed Ingber, Advanced Computer Controls

*Snail Graphics: A Graphics Kit for Runic*

Marty Franz  
*Increasing Throughput with the Dvorak Keyboard*

Don Fitchhorn, et al, Tandy/Radio Shack  
*The Word Processing – Phototypesetting Interface with Automatic Pagination*

Donald H. McCunn, Design Enterprises of S.F.

### MUSIC

*The Medieval Melody-Maker: A LISP Program*  
Arthur Hills, Sonoma State University

*The Soundchaser Computer Music System*  
David M. Kusek, Passport Designs

### TECHNOLOGY

*A Bionic Approach to Speech Processing*  
Bradley C. Stewart, Covox

*FIFO's: Rubber-Band Memories to Hold Your System Together*

Chuck Hastings, Monolithic Memories  
*Reaching Out – Computer Communications Means More Terms and Standards*

David L. Shaughnessy, U.C. Berkeley  
*Enhancing Your Apple II: Exact Field Sync*

Don Lancaster, author  
*A Thermometer in an Apple for Agriculture, Home and Laboratory*

Walter Maclay, Strawberry Tree Computers  
*Simple Communications Between Apples*

Keith E. Schubert, Blue Mountain Community Coll.  
*Inexpensive Expansion for Your 6502 Computer*

Winfried Wofacker  
*The IEEE-488 Bus for Personal Computers: An Overview*

Peter Baum, Apple Computer  
*Evaluation of Your Pascal, Basic or Fortran*

Alan R. Miller, N. Mexico Tech & Interface Age Mag.  
*MINIX: A Minimum Executive – or – What to Do While Waiting for a Long Printout*

Tom Pittman  
*Microprogrammable Filter*

Kiran Majithia, et al, IBM & San Jose State Univ.  
*Fifteen Variations on a Theme: A Computer-Oriented Algorithm*

Dmitri Thoro, et al, San Jose State University  
*Design Automation Techniques*

David W. Russell, Dasoft Design Systems  
*The Initial Graphics Exchange Specification: A Key to Future CAD/CAM Systems*

Paul Hollingshead  
*Four Switchable Keyboards for Computers*

Albert Kolb, Carmel Middle School (California)

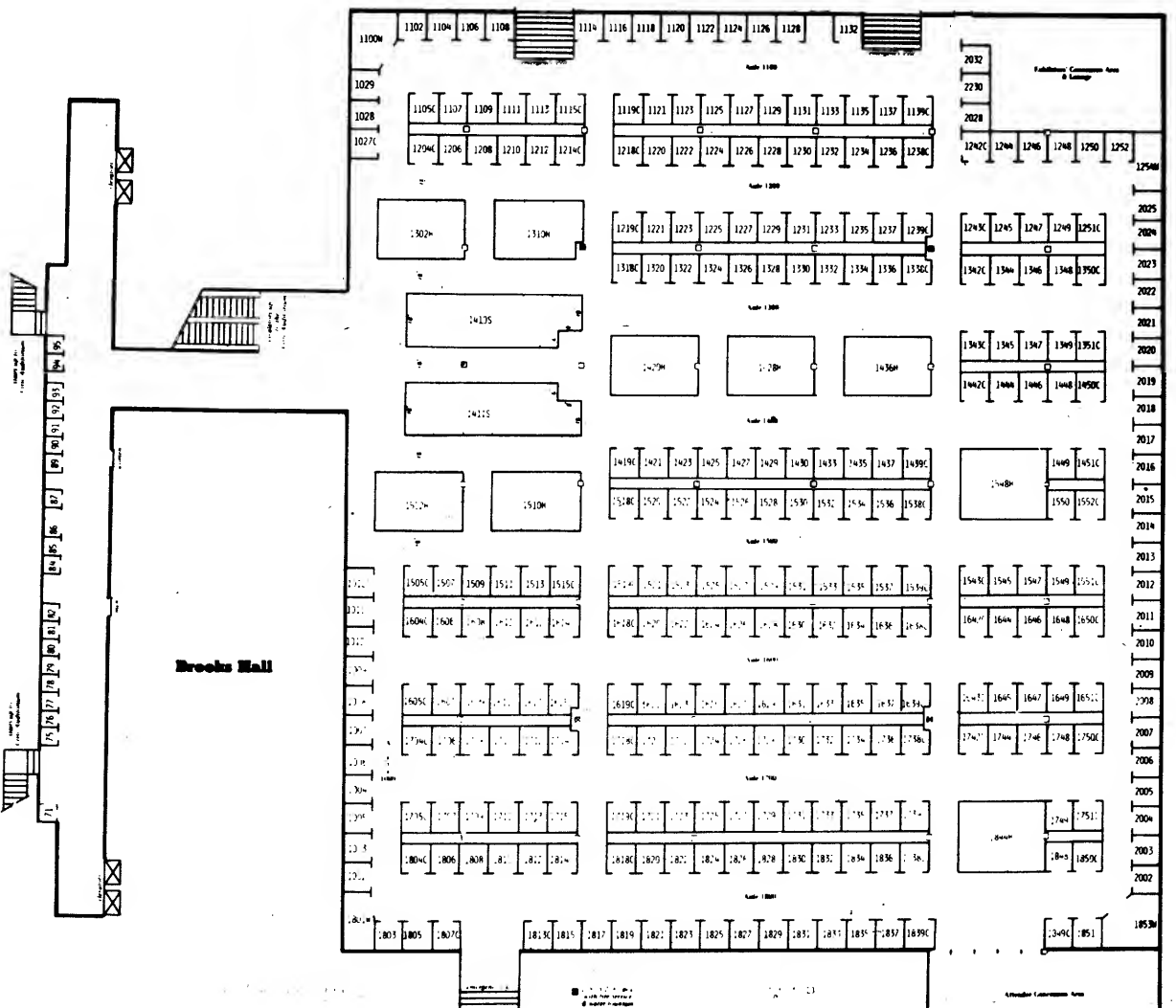
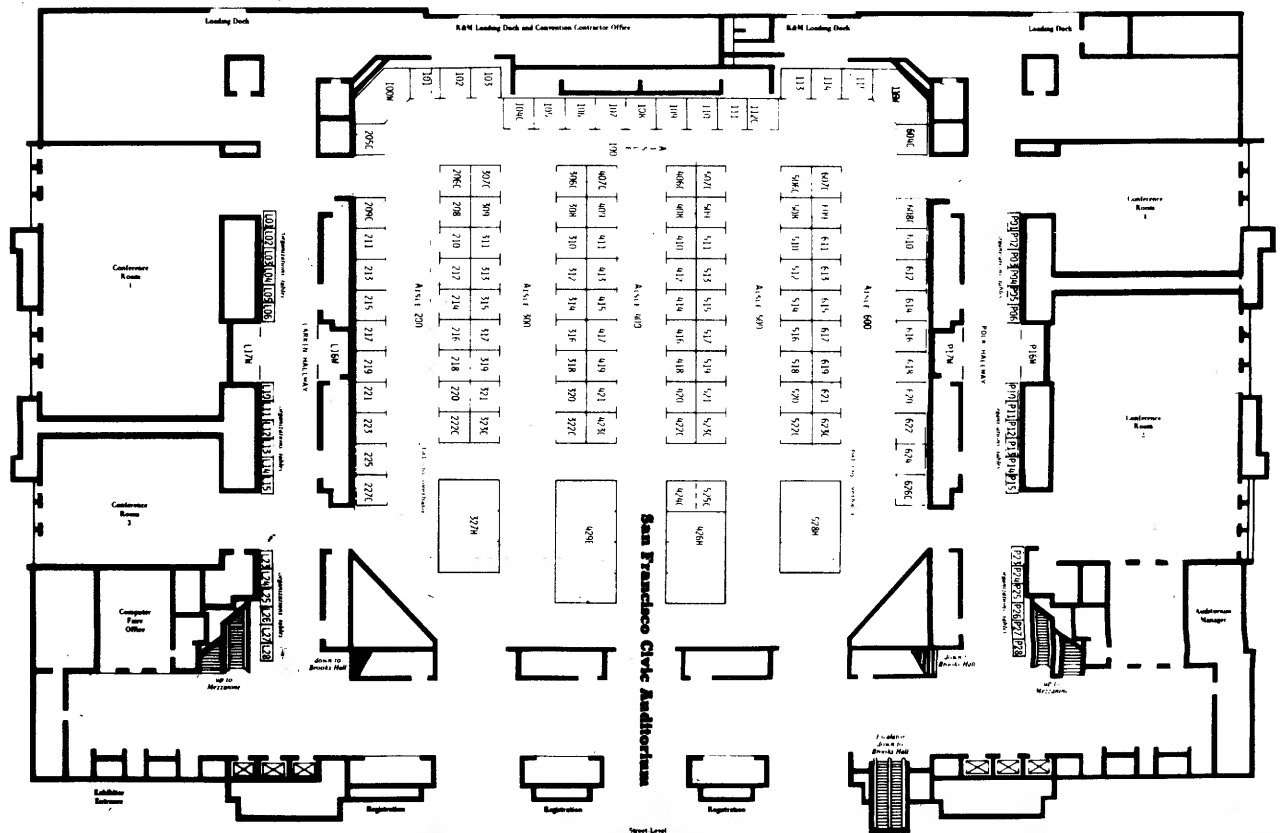
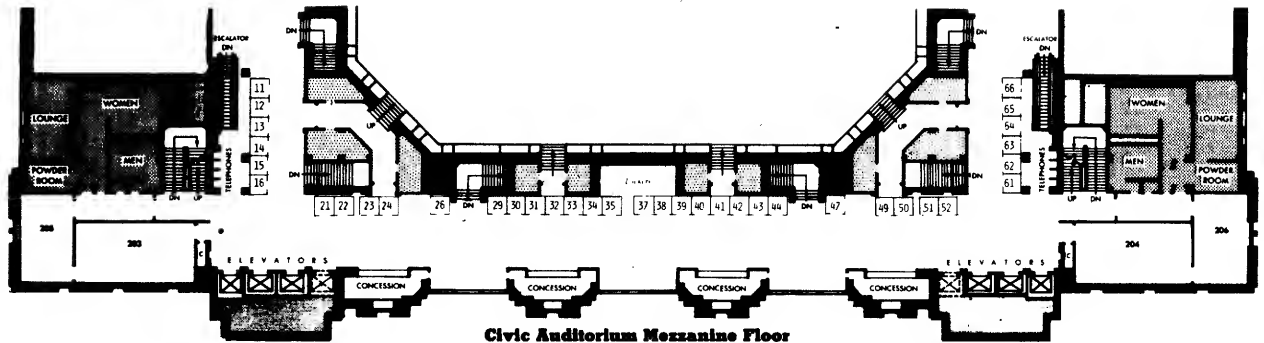
### MISCELLANEOUS

*Writing for the "Special Interest" Computer Press*  
John Walker, Sextant Magazine

*The First Computer/Videodisc Game: A Glimpse into the Future*

David H. Ahl, et al, Creative Computing  
*The Microcomputing Industry Today and Tomorrow*

Rodnay Zaks, Sybex



## Symposium on Medical Computers

Original papers, and proposals for workshops and tutorials, are now being solicited for presentation at the Sixth Annual Symposium on Computer Applications in Medical Care which takes place October 30 through November 2 at the Sheraton Washington Hotel in Washington D.C. The deadline for submission is March 15.

The Symposium will inform physicians, health care administrators, biomedical scientists, engineers, and other health care professionals about current and potential applications of computer technology to health care and to identify areas of research and development that need to be addressed. Participation is solicited from the medical and computer science perspectives. Topic areas include medical applications, computer systems and techniques, and demonstrated benefits. Papers accepted will be reviewed and published in the Proceedings of the Symposium.

For further information, please contact the Symposium Program Chairman: Bruce I. Blum, Johns Hopkins University, Traylor 514, Baltimore, MD 21205, 301-955-8379; or SCAMC, Office of CME, 2300 K Street, N.W., Washington, D.C. 20037, 202-676-4285.

### Conference Session

## Computers and the Nervous System

Which is the more efficient information processor, the computer or human central nervous system? In her 7th Faire talk, "Information Processing by the Computer and the Central Nervous System," Clara Torda, M.D. will discuss the differences and similarities between these two unique information processors.

"Theoretically, the performance of the computer regarding logical consistency, speed, accuracy and efficiency is far superior, except that its scope is limited," says Dr. Torda.

"Computers are highly complex fixed mechanical systems constructed from chips and are encoded by means of a binary number system or its derivatives. The CNS is built from neurons, each being a separate microcosmos of submolecular and subatomic processes," says Dr. Torda.

In her talk, Dr. Torda will discuss: the neuron, synapse, information processing (graded slow potentials (codes) and spikes), and computer and central nervous system coding techniques. Her comments will also include a summary of the known coding methods of the CNS, a discussion of brain waves, and a comparison of computer and human memory.

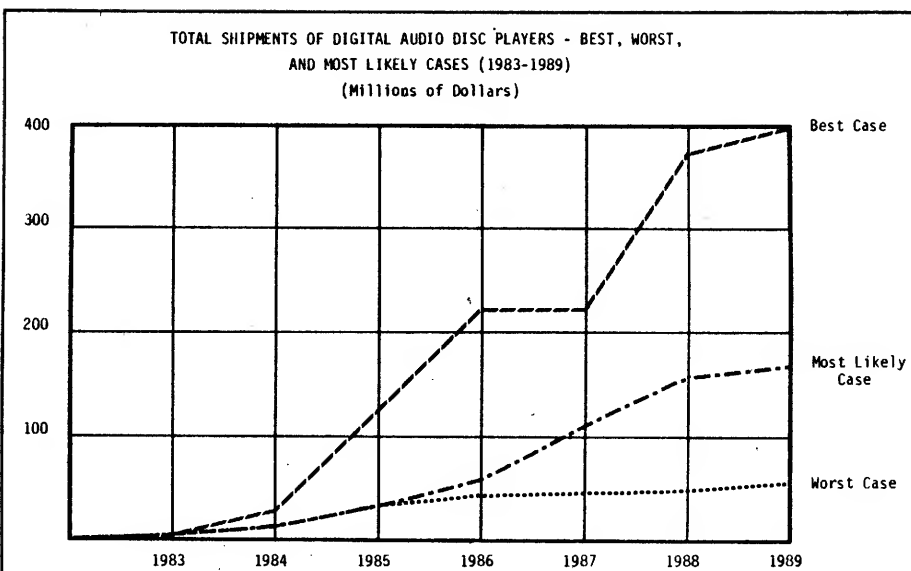
## Meeting Someone at the Faire??

**Suggestion:** Ask friends and associates to meet you in the balcony area of the Civic Auditorium. Specify the left, right, or center section. It has ample seating and overlooks the Civic Auditorium exhibition area.

**Note:** The public address system is NOT available for paging individuals, except for medical emergencies.

A pacifist is someone who is always trying to start a peace. — Jim Brett

I would define true courage as being a perfect sensibility of the measure of danger, and a mental willingness to endure it. — W. T. Sherman



## Possible \$200 Million in Digital Audio

The first new hi-fi components of the 1980's, digital audio disc players, are expected in the U.S. in late 1982 or early 1983. Using specially encoded discs, a system can produce an audio signal with extraordinary accuracy. For manufacturers and retailers, digital audio also holds out the promise of rejuvenated sales. According to a report just published by Venture Development Corporation, a Massachusetts consulting firm, sales of digital audio players to consumers will likely fall between \$170 and \$200 million by 1989.

Taking issue with some industry observers, VDC does not believe that the \$400 million level in annual sales will be reached in this decade. As discussed in the report, "Professional and Consumer Digital Audio Equipment: a Strategic Analysis," many key problems which will affect market development have not yet been resolved.

While the majority of high-end audio retailers indicate they will pioneer digital audio disc players, many interviewed by VDC do not expect sales to be overwhelming initially. As one audio specialist warned, "You know what happens to pioneers — the Indians shoot them full of arrows."

Looking forward to 1989, VDC notes several factors which will affect markets for consumer and professional digital audio equipment:

- the issue of standards
- Industry acceptance of the CBS compatible expansion (CX) system
- software availability
- new technology.

The standards question seems likely to be the most difficult to resolve. While the Sony/Philips compact disc format will be the first format introduced, it may not be the only one. There could be a replay of Beta versus VHS, if Matsushita moves to promote its own digital audio format. Venture Development's market scenarios indicate that a format struggle could have significant adverse impact on sales growth. Sales of professional digital audio equipment could also be adversely affected, since demand for digital discs would presumably be lower if there were a smaller installed base of digital audio players.

For more information, please contact: Ann M. Conway, Market Research Analyst, Venture Development Corporation, One Washington St., Wellesley, MA 02181, 617-237-5080.

## Micro Courseware Demand may Outstrip Supply 2 to 1

For the next five years demand for educational microcomputer software will outstrip supply two to one, according to a recent report by TALMIS. Although publishers are gearing up, the development process for courseware is fairly lengthy so that the growth in available commercial quality courseware will be slower than the growth in the installed base of microcomputers in educational institutions. Demand for educational courseware is expected to be at least \$75 million by 1985, rising from sales of \$10.7 million for the 1980-81 school year.

While educational and audiovisual publishers are the newest segment of the courseware industry and currently have the lowest market share except for government agencies, by 1985 they are expected to account for over half of all courseware sales. Software houses, on the other hand, which are now in first place with 42% of the market, are expected to fall to second place by 1985.

The top 25% of courseware publishers were found by TALMIS to have several unique tendencies. For instance, the more successful publishers tended to invest more per product and to provide more product for the money than less successful companies. They also had different machine choice, product type, and marketing channel mixes.

The TALMIS report, The Educational Software Market, was based on surveys of all major educational software publishers and a sampling of small developers within the industry. TALMIS itself is an information service for members of the interactive educational and training media industry. For more information on TALMIS, please contact: Jeanne Dietsch, TALMIS, 115 N. Oak Park Ave., Oak Park, IL 60301, 312-848-4000.

## Cassette Business Package

CBP, Cassette Business Package, runs on a TRS-80 Model III computer with 16K memory. It consists of the following programs: a cassette data base manager, a word processor, an inventory control system, a stock management program, a check balancing program, a label printer, a deposit calculator, a statistics program, a sort utility, and a key access utility.

Including two cassettes and a user's manual, CBP is priced at \$59. Model I version is also available for the same price. Send \$5 for a manual.

For more information, please write: Micro Architect Inc., 96 Dothan St., Arlington, MA 02174.

## AutoCheque

California Digital Engineering has added Autocheque, a complete personal checking system, to its line of microcomputer software.

In addition to the general ledger, Autocheque can also assign tax categories, break rent and phone lists into business and personal based on percentage, put credit card sub-entries in appropriate tax entries, and give the balance after checks are entered.

Autocheque's smart search program can locate any entry. The program also prints checks, converting the dollar value to plain English and putting it on the appropriate line. There are built-in protections so the user won't accidentally wipe out files.

Autocheque is available from California Digital Engineering, Box 526, Hollywood, CA 90028, 213-661-2031.

## New Security Code

Dann McCreary Software has announced the release of Absolute Security.

Absolute Security provides communication privacy over ordinary telephone lines for business or personal communication needs. The program does this by encoding text files in a code that, according to McCreary, is not only unbreakable in practice, but also in theory. McCreary asserts that his claims, though strong, are mathematically verifiable and thoroughly documented.

In a recent nationwide test of the system, over 40,000 Apple owners were challenged with a message encoded by Absolute Security. One line of the message was also provided in plain text as a starting point. After more than six weeks of concerted effort, using a variety of computer systems, McCreary says nobody was able to decode one word of the challenge message.

Absolute Security (for Apple II, DOS 3.3 and DC Hayes Micromodem II) is available at the introductory price of \$79.95.

For a limited time, Absolute Security is licensed for operation on two CPU's. For more information, please contact: Dann McCreary Software, Box 16435-SG, San Diego, CA 92116; 714-747-5041.

### Conference Session

## New Medical System

"Implementation of an Ambulatory Medical Information System," tells the story of a project to lower infant mortality in North Carolina. In 1981, Dr. Frederick R. Jelovsek and a team from Duke University implemented a microcomputer-based information system in rural health care clinics serving pregnant women and their infants. During his 7th West Coast Computer Faire talk, Jelovsek will explain how the project worked.

The technical objective of the project was to provide "improved information flow between the local clinics and a tertiary center . . . in the Women's Center at Duke," says Dr. Jelovsek.

The completed system provides demographic information, detailed "Encounter Sheets", hard and soft copies of flow sheets recording results of studies, immediate billing which includes discounts, and, when all results are in, a summary of the visit for placement in the patient's medical record.

Dr. Jelovsek's talk, which will be published in the *Proceedings of the 7th West Coast Computer Faire*, will detail transferring the language and operating system from Duke's PDP 11 mini-based system to micro.



# Sears Computer Folks Should Discover It's No Longer 1960

editorial by Jim Warren

We recently received our computer-printed monthly statement for our Sears charge account. It showed that we had ordered a "catalog sale 03" for \$108.73. Though we have ordered many items from Sears, we never ordered a "catalog sale 03". (We don't even know what it tastes like.)

## SEARS CATALOG ORDER DIDN'T KNOW

We called the catalog store from which we order most items. They asked for the store code printed on the bill. We read them everything that was printed on the bill; none of it was a store code.

They asked us to bring the bill in for them to look at it (an hour, round trip — contradicting the main attraction of catalog shopping by phone). We objected. They said they'd try looking through their orders for the last month; see if they could find it, and call us back.

## NEITHER DID SEARS ACCOUNTING

We called the store that maintains our charge records. The Accounting Department phone rang about 20 times. The operator came back on at one point, stating that the Accounting Department was short-handed and really swamped. No doubt!

After about 15 minutes of waiting and talking, Accounting stated that, in our case, "catalog sale 03" actually meant "\$BIND 10X25X50" and was from the office products division.

Oh! We blush to state that we don't know what a "\$BIND 10X25X50" is, even after shopping at Sears for 20 years and programming computers for 14 years.

But, then again, neither did Accounting. For that matter, neither did the store's office products department... and they were too busy to look it up.

## IS IT THE SEARS JOB CORP PROGRAM?

This had taken most of an hour of our time, and it took well over an hour of Sears staff time (a fact that should certainly interest any competent manager).

In the course of our conversation with Accounting, we asked if this kind of query was made, often. Our contact said it happened, constantly! Apparently we were not the only ones unable to decipher cryptic computer comments.

Since Sears has many thousands of credit card customers, they must be wasting at least thousands of hours of staff time (Sears contribution to minimizing unemployment?), as well as wasting a similar amount of customer time (value: \$0.00?), just due to this one myopic component of their computerized credit systems design.

## COMPUTERS SHOULD HELP; NOT HINDER

Computers can and should make things easier; not more difficult. Computers can reduce staff labor. And, they can make business interactions more palatable — not less comprehensible, when used in a manner convenient for the customer and the staff (rather than the manner most convenient for the data processing systems designer).

But, our d.p. friends rebut, perhaps Sears has too many transactions to be able to log each one of them in an intelligible form on the monthly statement. Not so.

**Example:** We recently ordered five items. One was sent; we received a computer notice of the disposition of the other four items (reorder, back-ordered, verify price, etc.). That notice identified each item. If they can do it on a notice where they want us to reorder, they can do it when they want us to pay.

**Example:** The phone company manages to give comparable identifying information on each transaction for which it bills (city name compares to product description; phone number compares to catalog number).

**Clincher:** Sears may not have the computing ability to identify items in their billing statements in a manner intelligible to the customer or their sales or accounting staff, however they do have the resources to computer-print a 238-character "Wrap up a beautiful Christmas..." sales hype at the bottom of the statement.

Come on, Sears. Give us some evidence that you ARE capable of implementing a *Inexpensive Business Systems*

humane computerized billing system. Surely, if the phone monology can do it, Sears can do it.

At a minimum, it would save Sears significant staff time (and, thereby, staff dollars). To do less is not only inconsiderate of your customers; it illustrates incompetency in business and data processing management.

**P.S.** — Sears eventually called back and stated that the item was a pair of binoculars, discovered by digging out the original order from their daily paper records... just like in pre-computer days.

Conference Session

# Management Delivers with Electronic Mail

"Many members of today's boardrooms were coming into industry at a time when the tape or wire recorder and the ball-point pen represented the most dramatic hardware changes of the preceding 30 years, so it is clearly understandable that the developments of the past five years are barely possible to grasp," says Bernard Husbands in "Participative Management via TELEMAIL."

In his talk at the 7th West Coast Computer Faire, Husbands will discuss

commercial electronic mail — "one of the technological infants waiting on management's doorstep" — and the use of TELEMAL as a management conference technique.

"The acceleration of technology is presenting upper management with such a long menu of new options that few have the time, training or interest to explore them fully," says Husbands. His paper will be published in the *Proceedings of the 7th West Coast Computer Faire*, available at the show in March.

**SYSTEMS KICKER.**

Reliability, price, and a performance kicker that leaves other 8-bit systems far behind: Real-time hardware vectored interrupts and the OASIS multi-user OS for an economical system that rivals 16-bit performance. CP/M is included. Floppy disk and hard disk subsystems, terminals, printers, board-level modules — all part of CCS full S-100 product line. A product line brochure is yours for the asking.

CP/M is a trademark of Digital Research  
OASIS is a trademark of Phase One Systems

**California Computer Systems**  
250 Caribbean Drive  
Sunnyvale, California 94086  
(408) 734-5811  
Telex 171959 CCS SUVL

**MAKING MINIS OUT OF MICROS.**



## Corvus Network Systems Products for IBM and Xerox

New interfaces make Corvus Winchester disk drive systems and local area network compatible in hardware and software with two of the industry's latest entrants: the IBM Personal Computer and the Xerox 820 System. Corvus is a supplier of microcomputer mass storage systems and local area network market.

This compatibility means that users of the IBM Personal Computer and Xerox 820 computer can now enjoy storage capacities of 5, 10, and 20 megabytes on 5-1/4 inch and 8 inch Winchester disk systems.

Corvus also announced its Multiplexer local area network will support both the IBM Personal Computer and the Xerox 820. This will allow Corvus disk users to build a back-end area network that links up to 64 microcomputers and allows them to share disk storage and printers.

Early this year, OMNINET compatibility with the IBM and Xerox systems will be available. OMNINET is Corvus Systems' disk-independent, carrier-sense-multiple-access (CSMA) local network, introduced at the 1981 National Computer Conference. Already recognized as a leading low-cost alternative to more expensive coaxial-based networks like Ethernet, OMNINET extends the end-to-end network limit to more than 4,000 feet, lets users combine multiple microcomputers with different operating

systems on one network, and uses twisted pair cabling.

Since 1979, Corvus Systems has shipped more than 5,000 mass storage systems for microcomputers made by such companies as Apple, Tandy, Cromemco, SuperBrain, Dynabyte, North Star, Vector Graphic, Altos and others. Corvus has developed additional Winchester disk systems and interfaces for the Apple III microcomputer, NEC's PC-8000 system, and for the most recent Commodore Pet model. The company also manufactures mass storage systems for Digital Equipment Corporation's LSI-II minicomputer.

Corvus mass storage systems are building blocks in creating the Multiplexer local network. The software supplied with this network is called the CONSTELLATION. With CONSTELLATION software users can share access to centralized files via the Corvus disk controller. Firmware for the controller supports advance features such as sector buffering, automatic error retries, diagnostics, transparent formatting with CRC error detection, and high speed data transfers using direct memory access (DMA) to RAM within the Corvus controller.

In the case of OMNINET — already licensed to several microcomputer manufacturers who intend to incorporate it in their new or existing systems — gateways are already being

developed that will connect the network to peripherals such as printers and modems. Corvus Systems said it has an SNA-compatible modem server under development.

For more information, please contact: Corvus Systems, Inc., 2029 O'Toole Ave., San Jose, CA 95131, 408-946-7700.

### Conference Session

## Around the World in a Gridapple

Computerized map-making and plotting packages have been in widespread use for almost a decade, and have often been available only on large-scale, expensive computers. In his Faire talk, "A MicroComputer-Based Geographic Information System," Benjamin Pierce introduces Gridapple, a geographic data processing package.

"Customized for the Apple microcomputer, Gridapple is intended as a low-cost alternative which retains all the essential features needed to digitize and edit maps, perform various types of analyses, and generate several forms of high-quality output," says Pierce.

Pierce will describe the design and implementation of Gridapple, the history of the GIS field, and the problems and delights of seeing the world by computer. Pierce's talk will be published in the *Proceedings of the 7th West Coast Computer Faire*, available at the March show.



## Save 33% on Faire Registration

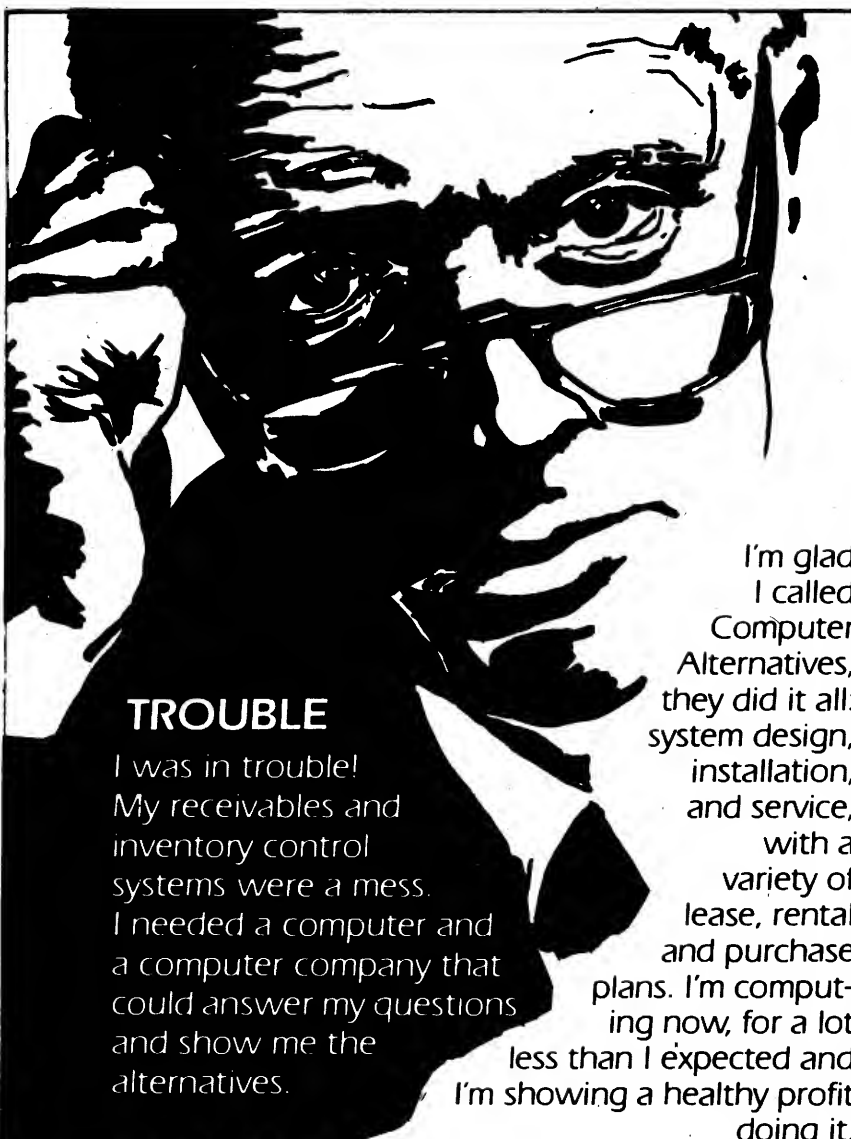
By pooling with friends and associates, you can each save \$5 on 7th Faire registration fees — paying \$10 each instead of the \$15 "at the door" fee. (Or, you can "deal" registrations and earn an extra couple dollars for yourself or your group). Here's how:

Purchase Faire registrations in blocks of 10, advancing \$100 (prepaid or COD). You can return up to 5 of those 10, any time after the Faire and prior to April 15th, and promptly receive a refund of \$10 per returned/unused registration.

To do this, send your check or COD order for 10 or more registrations (advancing \$10@) to:

Pre-registration Desk  
Computer Faire  
333 Swett Road  
Woodside CA 94062

Include your street address (necessary for certified UPS shipping). The Faire pays shipping charges on prepaid orders. You pay shipping and collection charges on COD's.

**TROUBLE**

I was in trouble!  
My receivables and inventory control systems were a mess.  
I needed a computer and a computer company that could answer my questions and show me the alternatives.

I'm glad I called Computer Alternatives, they did it all: system design, installation, and service, with a variety of lease, rental and purchase plans. I'm computing now, for a lot less than I expected and I'm showing a healthy profit doing it.

Call for more information and a schedule of money saving "COMPUTING ALTERNATIVES" Seminars.

**COMPUTER ALTERNATIVES**  
The smarter way to do business.

Info: 459-1366  
Service: 828-9410

(continued from page 4)

took in over 90% of all of the increase in Gross National Product in the past several years — Exxon, Gulf, Texaco, Mobil, SoCal, Shell, and B.P. It is well researched, well written, extensively indexed, . . . and infuriating. If there was ever any question in your mind regarding the definition of monopoly and its adverse effects, this book will adequately clarify the subject. The Robber Barons are not dead; they're just not bothering to build universities or art centers any more.

### THE DUTCH CONNECTION

It seems that the orient does not have a monopoly on off-shore tech talent and/or manufacturing facilities. Neighbor Walt Reynolds, a long-time elektroniker and consultant (e.g. for such luminary Laureates as Josh Lederberg — Nobel winner in Genetics, and Linus Pauling — Nobelette in bio), now operating under the company name of Applied i (sic), has stumbled across a prime source of talent in eastern Holland.

It seems that he worked over there a coupla decades ago, was recently back visiting, and found that Holland has built its own variation of our Silicon Valley (though not limited to semiconductors). Sometime after the last official war (WW II), the Dutch government made a concerted effort to develop a strong applied technology community in east Holland, beginning with the establishment of Twente Technical University. Additionally, the University was actively encouraged to cooperate with the development of technical groups and companies in the region.

This had a similar effect to Stanford and UC-Berkeley's effect on Bay area technology. That area of Holland is now a major center for technical talent and facilities, including ample and up-to-date digital and computing expertise.

Furthermore, while visiting there, Walt was introduced to some folks from Holland's Overijssel Industrial Development Authority — a noticeably simpler and more amicable meeting than invading Sacramento's bureaucratic halls. It seems the Dutch Authority is a red-tape cutter, not a red-tape maker.

The upshot of the whole thing is that he is now pursuing some joint efforts with his old and new Dutch connections . . . including the design, implementation, and programming of some products for the IBM personal computer (an integrated hard disc system, for a starter) that is likely to be completed by the time this issue reaches you — three months after the initial Holland contact! (Lest you flood him with IBMish calls, they're designing and

implementing the system, then will offer it to U.S. manufacturers on a license basis. Walt is a technologist, cooperating with this new-found pool of significant technical talent in high-quality, fast-turnaround design. He has no slightest interest in becoming a manufacturer or distributor.)

### MONSTER DATA TRANSFER & STORAGE — AT LAST!

Microcomputers are great, but they are doomed to remain grossly under-utilized semi-toys until they can handle large amounts of data . . . jus' like those inhumane, overly-expensive megamonster mainframes. Floppy discs and hard discs help, but micros have been missing a standard and inexpensive means for mass data transfer and archival storage.

30 character-per-second phone links or 300 kilobyte (= 300,000 characters) floppys jus' don't cut it for transferring multi-megabyte files. (Note: A 100,000-name mailing list occupies more'n a megabyte — one million characters.) And it becomes very expensive, very fast, to try to do regular archival backup on floppys, to say nothing of using \$100-\$300 hard-disc cartridges.

Many micro makers are addressing the backup problem by offering tape cartridge systems. It's cost effective, but because there is no recording standard, and because few big computers have such systems, it doesn't solve the problem of transferring large quantities of data.

There has been a standard solution in the dinosaur machine world for decades — "industry compatible" (meaning IBM compatible) 7- or 9-track tape. The recording standard is irritatingly and unnecessarily complex and expensive to implement, but . . . it is a standard; it does exist on all those antique machines; the recording media is inexpensive; and, a number of companies now make reasonably inexpensive 9-track tape drives.

A coupla years ago we suggested that a "hot product", immediately needed, was an inexpensive, 9-track tape subsystem for microcomputers.

About a year ago, Alpha Micro announced a 9-tracker that was a little too expensive for us. More recently, other companies have announced other 9-track peripherals.

Now, we have received a note from a Natick, Massachusetts, company named Alloy Engineering Company (precisely the company you would expect to produce a tape system, right?) announcing a tape system using the

(continued on page 15)

## AVOID LONG LINES! PRE-REGISTER FOR FAIRE

Although the Computer Faire, itself, is not staffed to handle preregistration, it has arranged for a number of cooperating stores to carry prereg packets. A partial list is below.

The stores prefer that you drop by to pick up your prereg — they'd like to see you and have you see what they have to offer. ("Know your dealer.") However, should you be unable to do so, several of them are accepting mail orders. . . if you do the following:

1. Send your mail order *early*. (Remember, the U.S. Mail Service will be handling its delivery in both directions.)
2. Send full payment (phone the store for their reg fee; by FTC regulations, the Faire cannot tell them what to charge), *and* a stamped, self-addressed, legal-size envelope.

The stores accepting mail order preregistrations are marked in the following list with an asterisk.

<b>Opamp Technical Books*</b> 1033 N. Sycamore Ave Los Angeles CA 90038 (213) 464-4322	<b>Coastal Computers</b> 986 Monterey St San Luis Obispo CA 93401 (805) 543-9339	<b>Digital Deli</b> 80 W.El Camino Real Mountain View CA 94040 (415) 961-2670
<b>Computerland South Bay</b> 16720 Hawthorne Blvd Lawndale CA 90260 (213) 371-4624	<b>National Computer Center</b> 3202 E.Ashlan Ave Fresno CA 93726 (209) 227-8479	<b>AIDS</b> 301 Balboa St San Francisco CA 94118 (415) 221-8500
<b>SCR Electronics</b> 5303 Lincoln Ave Cypress CA 90630 (714) 527-2554	<b>Zackit/Monterey*</b> 350 Del Monte Ave Monterey CA 93940 (408) 375-3144	<b>Computerland the Castro</b> 2272 Market St San Francisco CA 94114 (415) 864-8080
<b>Thorpe Datasystems Inc*</b> 7114 Owensmouth Ave Canoga Park CA 91303 (213) 703-6900	<b>Affordable Computers*</b> 716A Lighthouse Ave Pacific Grove CA 93950 (408) 373-7177	<b>Computerland El Cerrito</b> 10042 San Pablo El Cerrito CA 94530 (415) 527-8844
<b>Computerland</b> 289 E.Highland San Bernardino CA 92405 (714) 886-6838	<b>Kepler's Books</b> 821 El Camino Real Menlo Park CA 94025 (415) 324-4321	<b>Byte Shoppe</b> 1122 B St Hayward CA 94541 (415) 537-2983
<b>MicroXchange</b> 222 E.Carrillo St No. 101 Santa Barbara CA 93101 (805) 963-4187	<b>Byte Shop</b> 1415 W.El Camino Real Mountain View CA 94040 (415) 969-5464	<b>Computer Store Corvallis*</b> 2015 NW Circle Blvd Corvallis OR 97330 (503) 754-0811

## How to Select a Business Computer

### Full-day seminar

An in-depth, 6-hour seminar for the business person considering the purchase of a computer for their business. Questions that will be addressed include:

- Should you really get your own computer?
- What do you need to know in selecting your system?
- How do you define your system needs?
- How can you get the best value from your suppliers?
- How can you insure that your selection will be your best selection?

### The Seminar

- \* Alternatives to getting your own computer
- \* What you are really getting into
- \* Sources of information and assistance
- \* Introduction to computer terminology & operation
- \* Determining the size of the system you need
- \* What to look for (and look out for) in equipment
- \* What to look for in business applications software
- \* How to select the best vendor for your needs
- \* Selecting and using specialists & consultants
- \* Cost-saving techniques for dealing with computer vendors
- \* Criteria to use in your final selection

### The Lecturer

**Arnold M. Roberts**  
Twelve years experience in business data processing  
Systems software manager at the American Broadcasting Co  
Regular lecturer in Professional Development Seminars  
Producer of microcomputer software packages for business  
Currently President of ADC Associates  
Strong background in systems analysis and design, implementation, technical support, and in-house training  
Also experienced in marketing and management

### Schedule

This seminar will be offered in two 3-hour sessions on Friday, and will be repeated for another group in two 3-hour sessions on Sunday, March 19th and 21st. The sessions will be 9:30-12:30 and 2:00-5:00 pm.

The seminar will take place in the San Francisco Civic Auditorium, at Grove & Larkin, during the 7th West Coast Computer Faire.

Registration is \$125 and includes admission to the Computer Faire and a complete set of seminar handouts.

Preregistration is *strongly* advised. Space is limited to the first 110 registrants and the seminar is expected to be heavily subscribed. Call the Seminar Registration Desk at Faire Headquarters, (415)851-7075, 10am-4pm, Monday-Friday. MasterCard & Visa accepted.

## Logicon to Develop AWACS Program

Logicon, Inc. (AMEX-LGN) received a \$4,047,650 subcontract to help develop a maintenance training system for the Air Force E-3A Airborne Warning and Control System (AWACS) data processing and display subsystems.

Logicon will participate in the program with the JWM Corporation of Philadelphia, Pennsylvania, which received a \$9.1 million prime contract from the Air Force System Command's Electronic Systems Division.

The JWM/Logicon effort calls for a computerized training system that will include an instructor console and six student consoles in addition to a mock-up of the central data processor and display subsystems. Students will learn complex malfunction analysis by utilizing automated feedback and remedial queing techniques.

All student actions will be monitored at the instructor console, enabling the instructor to anticipate student problem areas and assist as required.

When completed, the maintenance training system will be installed at Keesler Air Force Base in Biloxi, Mississippi.

Logicon's portion of the contract will be performed by the company's Tactical and Training Systems Division in San Diego.

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## Medical Imaging with Micros

The minicomputer has given way to the microcomputer, at least in Dr. Michael Richardson's field. Dr. Richardson, who will speak at the 7th West Coast Computer Faire, says digital image analysis is now available to the physician with a personal microcomputer. "I feel that microcomputers such as the Apple II are capable of digitizing, displaying, and manipulating medically useful images", says Richardson.

The problem with small personal computers, he says, is that they can't display true gray scale graphics. "Medical images, on the other hand, usually con-

tain many subtle shades of gray", Dr. Richardson says. In his illustrated talk, which will be published in the *Proceedings of the 7th West Coast Computer Faire*, Richardson will detail a remedy for the gray scale problem known as "dithering".

According to Richardson, "Dithering is analogous to the half-tone process used by newspapers to print photos, in which the eye is fooled into seeing gray shades." The physician will also discuss hardware and software options he found useful in making and displaying the images.

## Weather Information Videoprints

Pursuant to an agreement between Image Resource Corp. and Kavouras Inc., a Videoprint System is now available with the Kavouras RADAC weather radar system. This combination permits weather watchers to have quick high-quality color photographs of real-time weather radar information.

The RADAC system takes direct National Weather Service data and translates it into six-color images, showing storm formations, sizes, shapes, intensities, and movement.

By using the desktop-sized Videoprint System photographs in slide or print formats of the weather data can

be kept as permanent records, available for television use.

Each RADAC installation has instant access by telephone to the nationwide RADAC network, creating a resource for coast-to-coast weather information.

The basic RADAC system consists of a CRT monitor and a control panel. Controls include range selection, quadrant expansion, zoom and pan, and refresh control. Also included in the RADAC output are elevation, time, and a precipitation alarm.

RADAC system users include the National Weather Service, airlines, the offshore oil industry, utility companies, and television news.

For more information, contact: Image Resource Corp., 2260 Townsgate Rd., Westlake Village, CA 91361; 805-496-3317.

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What applications do you use a computer for?

What devices do you use with your computer system?

Do you use any information services or computer networks?

What services do you recommend?

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IBS82

## Note: CHILDREN AT THE FAIRE

The Computer Faire is a conference and trade exposition about computing and information processing. It is designed for mature individuals who have a sincere interest in learning about (or learning more about) computing, information management, computers, and "the information society".

These topics are presented at the Faire, presented by adults, and presented for adults... and mature, seriously interested young people and students. Although the Faire includes some element of entertainment and occasional electronic games, the Faire is not appropriate for children nor for immature young people. (Among other things, this is reflected in the single registration fee, for adults.)

Parents and teachers are discouraged from bringing immature individuals to the Faire. To do so is unfair to the other attendees, unfair to the speakers, unfair to the exhibitors, ... and unfair to the children.

Therefore:

Children found playing or otherwise causing a disturbance in the convention center may be ejected from the building — just as they would if they were being disruptive in a university classroom, business office, engineering lab, or training seminar (or, for that matter, in a theatre, play, or symphony). The park in front of the Auditorium may be appropriate for children's play; the Faire is not.

## USED EQUIPMENT FOR SALE

If no other phone is listed, call 415-851-7075, early evenings or weekends.

Any or all of 10 Soroc IQ-120 terminals, includes one topless model (chain-saw art — Jim didn't like the fan whurring in his bedroom, so provided other ventilation). All are currently in use by Faire gnomes. \$500 each.

Genuine 6th Computer Faire T-shirts. Mitch, Box 1688, Palo Alto CA 94301.

Five 64K Piceon S-100 RAM boards, all "strapping" options DIP-switched. Now in use.

Several (legal) KTS telephones, the kind with the 6 buttons at the bottom, Touch-Tone "dials". Why rent when you can own? 415-851-7610.

Expected to be available in February: About ten 5MB CDC Hawk cartridges and five 15MB CDC Phoenix cartridges (used on Alpha Micro system), no longer needed for backup.

May be available after March: California Computer Systems CCS-300 CP/M system including 64K, dual 8" drives, CP/M and Oasis.

May be available after March: Zenith(Heath) Z-89 including 64K, 5-1/4" drive, dual 8" Data Compass drives, CP/M and HDOS, miscellaneous software pkgs.

May be available after March: Teletype Model-40 chain printer, 132-columns, upper & lower case chain, floor-mount sound enclosure, printing 120,000 address labels at the time of this writing.

May be available around June: King Kong type Alpha Micro system, huge memory, twelve RS-232 ports, 6-platter 90MB CDC Phoenix drive, 2-platter 10MB CDC Hawk drive, 8" Wango dual floppy drive, Dravac encryption board, AMOS, Alpha Accounting Package (elderly), Syndex database system, miscellaneous other applications pkgs. The Faire's workhorse for several years.

Genuine antique PDP-8/I, 16K core, 4 DECTape drives (TC-01, TU-55's), twin 6' racks, weighs under one ton, OS-8, Dibol, etc. \$2K to a good home (or even to a glue factory).



(continued from page 12)

Cipher Microstreamer Series One 9-track drive that will plug into S-100-based machines, (including Alpha Micro machines) for only \$6795, unit quantity.

AEC also has interfaces for Altos (non S-100), DEC and Data General machines. (DEC and DG units cost a bit more than the \$6795.)

#### NOW THAT'S A WARRANTY!

The list price for these Alloy Engineering tape systems includes a full-year warranty providing for 48-hour, full-unit replacement of the drive or interface, should they fail! That's the best possible way they could prove that they feel their units are reliable.

#### BUT, ARE THEY REAL?

Having watched the computer industry's product announcements for most of a decade and a half, we looked at this Alloy Engineering announcement with some faint tinge of cynicism. They had announced the product. But, were they delivering? (Had they even begun manufacturing?)

We phoned their western distributor (DSM & Associates, Agoura, California, 213-991-9901) and asked about availability. They asked if a 2-week delay would be too long! Needless to say, we ordered one.

In less than the two weeks stated, Dave Miller of DSM showed up at our door with the subsystem. We plugged it in, loaded the software from a disc he had brought and read data from an old tape we had laying around — all in about 15 minutes. After playing with it for a while, we asked for some software enhancements (some people are just never satisfied), and were promised it by the end of the week. Now, folks — *that's* service!

#### APPLE WORDZ

One of our more reliable Apple sources (sic, sic, sic), sez that Apple is shipping 25,000 Apples a month (yup... 300,000/year). They also say that Apple has a single-board Apple bud that uses only about 12 chips and could sell for about \$300, but won't be introduced until the market is optimal (presumably when sales of the Big Apple begin to drop off).

#### MAKING THE BIENNIAL ELECTRONIC JOB-HOP EVEN EASIER

IEEE (the Institute of Electrical and Electronics Engineers) announced an interesting new member service — a "Professional Abstracts Registries". This is a computerized

#### Faire Smoking

By city ordinance, smoking is permitted only in the entrance lobby of the Civic Auditorium. It is explicitly prohibited in the conference halls, perhaps due to limited ventilation.

#### Conference Session

### Public Domain Software in Medicine

"The private practitioner is a fragile creature struggling to survive in an inflationary spiral of labor costs," says physician Larry Stoneburner, a speaker in the upcoming 7th West Coast Computer Faire. In his talk, "Public Domain Software in Medicine," Stoneburner will discuss two programs designed to aid the practitioner: COSTAR and File Manager.

According to Stoneburner, the essence of the COSTAR design is to "allow each practitioner to design a patient care record totally unique to that physician." In a medical system which makes of the private practitioner "a fiercely independent, egocentric individual who is constantly harassed by required forms and standard protocols", Dr. Stoneburner advocates the use of these two programs, the one affording individual tailoring possibilities, and the other, File Manager, designed to handle routine information processing jobs "as a stand-alone system without on-site programming support."

Dr. Stoneburner will include in his talk a "Resource Roster" listing a number of medically oriented programming tools and application software programs.

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national employment information system. For more info, call 800-431-2616 (or 914-762-2522 in NY state).

#### GETTING OFF THOSE MAILING LISTS

The Post Office offers you some protection against sex-related junk mail, but there often seems to be no way to get off of all the rest of those junk mail lists.

Not so. Many of the lists are provided by mailing list companies that belong to the Direct Mail/Marketing Association. And DMA maintains a "Mail Preference Names" list. We understand this is a list of names to whom junk mail is *not* to be sent.

#### BILLIONS

(A computer application, no doubt) The Mohawk Valley Section of the IEEE has pointed out that:

A billion seconds ago, we were in World War II, prior to the A-bomb.

A billion minutes ago, Christ was still around.

A billion hours ago (57,000 years), cavemenn — and cavewomen — were praying to black obelisks from the sky.

But, a billion dollars ago (newspapers use that as a shorter version of \$1,000,000,000.00) was just yesterday in terms of 1981 U.S. government expenditures.

#### HELP!

We know there are professional slave ships that provide eternal data entry keyboarding services, and we need some of that service (e.g., we still have to enter some of the statistics from last year's 31,700+ Computer Faire attendees). But, we don't know where such services are. If you know of someone who is reputable and economical, please drop us a note.

#### WORTHY COMMENTS

Dave Gombert, an ex-computer distributor and long-time computer pro recently said that a manufacturer's questions *should* be: "What's the right way to solve a prob-

lem?" then, "Can we afford to do it?", rather than merely, "How much does it cost?"

And, we don't care if it is saccharin: "The world should always be a little better because a man [person] has lived." — Lord Fauntleroy's mother.

#### WORD MONGERING

This issue's award for outstanding (or is it outrageous?) word wrangling must go to The Calculating Lady Computer Services of Marina del Rey, California.

A lurid observer of the computer scene suggested that internal documentation must be for computer hackers (ug!).

#### YOUR VERY OWN PHONE SYSTEM

You do know, don't you, that you no longer have to eternally rent your phone gear from the local telecom monopoly? Among other things, we have run across a dandy 16-station microprocessor-based, 2-wire phone system from Mitel (a Canadian firm, also big in the semiconductor racket) for a very reasonable purchase price. They have bigger ones; they also have (or are about to have) very small systems appropriate for homes-with-teenagers. Our info source has been a highly helpful and unusually equitable dude named Jim Gallaway of Gallaway Enterprises (Redwood City, 415-367-1101).

#### A LAST PASS THROUGH THE PILE-FILE

If you're into secret codes and encryption (and decryption), you might take a look at *Cryptologia*, a subscription journal edited by Brian Winkel, Rose-Hulman Institute of Technology, Terre Haute, IN 47803.

You did know, didn't you, that *Byte*, the largest magazine addressing microcomputing, is now printing 260,000 copies per issue?

Also, we received a dandy bimonthly tabloid newspaper called *Consulting Opportunities Journal* out of Washington, D.C. (202-296-0436). The 28-pager we got was loaded with information useful to consultant types, ranging from tax hints, to promotion

suggestions, to consulting opportunities.

And, we have a letter dated last summer, sayin' that International Robot Events Limited (415-431-1677) is gonna hold the First International Robot Exhibition in San Francisco's California Academy of Sciences in the summer of 1982, a 3,500 square-foot exhibition that sounds like fun. (comparison: the Computer Faire occupies about 120,000 sq.ft.)

#### Conference Session

### MicroTeach — Courseware Made Easy

There is a growing interest in the use of microcomputers in schools, and a number of courseware generator systems have become available. In his 7th West Coast Computer Faire talk "MICROTEACH — Courseware Production made Easy," Thomas P. Bun will describe this system.

"The MICROTEACH System by COMPUMAX is characterized by a menu-driven approach, having the available options always visible on the screen, and leading the author through the subsequent stages of courseware development step-by-step," says Bun.

In his presentation, Bun will explain why an author using MICROTEACH doesn't have to learn any computer languages or become familiar with systems commands. Sample menus and commands will be shown for the product which is currently available on the ATARI 800.

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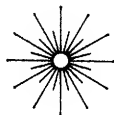
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☐ Education/Games ☐ Other \_\_\_\_\_  
☐ Dealer ☐ Distributor ☐ End user  
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**Computer Networks in the U.K.**  
Rod Goodman, Univ. of Hull, England  
**The Microcomputer Industry in France**  
J.P. Lamoitier, Sybex  
**Getting the Best Computer Job**  
Kent D. Kitts, Omicrom

**BIOMEDICAL**

**Microcomputer Applications in Academic Medicine**  
Thomas N. Abdella, et al, Univ. of Tenn.  
**The Community Health Information Project (CHIP): Developing a Community-Based Information Utility for the Disabled Using Microcomputers**  
Joel S. Yudken, Mid-Pen. Conv. Project  
**Medical Image Analysis with a Microcomputer**  
Michael L. Richardson, M.D.  
**Implementation of an Ambulatory Medical Information System on an LSI-11 Based PDP-11/23 Microcomputer**  
Frederick R. Jelsvsek, et al, Duke Univ.  
**Design of a Computerized Pulmonary Laboratory**  
G.B. Rothbart, et al, Science Applications  
**Public Domain Software in Medicine: The MUMPS Connection**  
Larry L. Stoneburner, M.D.  
**Implementing Full ANS MUMPS on a Microprocessor**  
David J. Marcus, et al, Micronetics  
**Design & Med Logic Systems: Systems Analysis for Small Computers: A Case Study**  
Rodert van Spyk, C.S.U. at Hayward  
**Information Processing by the Computer and the Central Nervous System (A Comparison)**  
C. Torda, Stanford University  
**"Blaise": A Portable CMOS Bioterminal Programmable in Pascal**  
H. Tavernier, et al, Faculte de Medecine Pitie-Salpetriere, Paris

**NOVICES**

**Microcomputing Languages, or How to Talk to Your Computer**  
June B. Moore, J.D.  
**How to Buy Your Own Computer**  
Jerry Willis, Texas Tech University  
**Towards Computer Literacy**  
James S. Milojkovic, Stanford  
**Computer History for Beginners**  
Peggy Comer, Sunburst School  
**Software Development and Operating Procedures for Personal Computers and Microcomputers**  
Paul Holliday, Computer Sciences Corp.

**LEGAL**

**Electronic Game Pirates: The Scramble for Viable Protection**  
Michael D. Scott, Scott Report  
**Legal Care for Software**  
Daniel Remer, Attorney  
**How to Leave and Compete with Your Employer Without Getting Sued**  
Jaes H. Pooley, Mosher et al  
**Systems Documentation and System Malfunctions**  
John P. Walter, C.S.U. Dominguez Hills  
**The Impact of Computer Theft**  
Thomas J. Smith, Anchor Pad

**EDUCATION**

**A Review of Preschool Children's Use of the Computer**  
Kathleen M. Swigger, N. Texas State  
**Foundations for the Use of Computers in Preschool Classrooms**  
Jerome R. Schmidt, et al, Education Svc.  
**Visual Discrimination and Preschoolers**  
Deborah Smith-Willis, et al, Texas Tech.

**Electronics Interaction with the Preschool Handicapped Learner**  
David L. Craig, Texas Tech University  
**Recommendation for Logo Learning Centers**  
Vicki Carver  
**A Suggested Model for Establishing the Validity of Computer Assisted Instructional Materials**  
Sherwin Steffin, Edu-Ware Services  
**Computer Applications in Assessment and Evaluation for Preschool Children**  
Dee LaMont Johnson, Texas Tech.  
**Benefits of Using Computers in Special Education**  
Mary M. Humphrey, et al, Teaching Tools  
**Special Education Management System Using Microcomputers**  
Leonard T. Meuer, Travis School District  
**Microteach - Courseware Production Made Easy**  
Thomas P. Bun, Compumax

**BUSINESS**

**Raising Capital for the Development of Software and Other Computer Technology Using R&D Limited Partnerships**  
Fred M. Greguras, Attorney  
**Which Stock-Market Software?**  
R.E. Packer, Ph.D.  
**Bottom-Line Micros**  
David M. Prittle, Smart Management Sys.  
**Management Information for Productivity**  
Thomas P. Hill  
**Access/80: Report Generation to Data Management in Three Steps**  
Frederic Gey, Friends Software

Man's mind, stretched to a new idea, never goes back to its original dimension. — Oliver Holmes

Try putting your pillow at the foot of your bed and sleeping turned around one night. If you find you sleep uncomfortably, then beware — for your ability to innovate and move into the future is in danger.

# Best of the Computer Faires

Conference Proceedings of the

## West Coast Computer Faires

(1)

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